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DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION FOR IRELAND.

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TENTH  
ANNUAL GENERAL REPORT  
OF THE DEPARTMENT.

1909-10.

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Presented to both Houses of Parliament by Command of His Majesty

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1911.

DUBLIN CASTLE,

24th March, 1911.

SIR,

I have to acknowledge the receipt of your letter of the 21st instant, forwarding for submission to His Excellency the Lord Lieutenant, the Tenth Annual Report of the Department of Agriculture and Technical Instruction for Ireland.

I am, Sir,

Your obedient Servant,

J. B. DOUGHERTY.

THE SECRETARY,

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
DUBLIN.

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# TENTH ANNUAL GENERAL REPORT

OF THE

Department of Agriculture and Technical Instruction  
for Ireland.

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TO HIS EXCELLENCY  
JOHN CAMPBELL, EARL OF ABERDEEN,  
&c., &c., &c.,  
LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR  
OF IRELAND.

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MAY IT PLEASE YOUR EXCELLENCY,

I have the honour, on behalf of the Department of Agriculture and Technical Instruction for Ireland, to submit their Tenth Annual General Report.

Following the procedure adopted in previous years, the Annual Report of the Department includes operations up to the close of the agricultural year. It has been found more convenient to adopt this arrangement than to limit the Report to the period of the financial year.

The Report has been divided as follows:—

## PART I. ADMINISTRATION AND FUNDS.

1. Council of Agriculture and Boards.
2. Funds of the Department.
3. Administration of the Endowment Fund.
4. Central Institutions.
5. Miscellaneous.

## PART II. DETAILS OF THE DEPARTMENT'S OPERATIONS.

1. Agriculture.
2. Technical Instruction.
3. Fisheries.
4. Statistics and Intelligence.
5. Veterinary.
6. Transit.

## PART I.—ADMINISTRATION AND FUNDS.

### I.—COUNCIL OF AGRICULTURE AND BOARDS.

The Council of Agriculture, which is constituted under Section 7 of the Agriculture and Technical Instruction (Ireland) Act, 1899, consists of 104 members, of whom 68 are appointed by the County Councils and 34 are nominated by the Department, the President and Vice-President of the Department being *ex-officio* members.

By Section 27 of the Act of 1899 the members of the Council of Agriculture and of each Board established by the Act, hold office for terms of three years. The present Council was constituted in April, 1909, and the members will, accordingly, hold office until 31st March, 1912.

The sixteenth meeting of the Council was held on the 30th November, 1909. Among the more important subjects discussed at this meeting were the following:—horsebreeding in Ireland, forestry, Irish fisheries, the Royal Veterinary College of Ireland, school garden instruction in connection with National Schools, and the Irish Dairy Herd Scheme.

The seventeenth meeting of the Council was held on the 24th May, 1910. The following among other matters were under discussion:—A dead meat trade for Ireland, the Development and Road Improvement Funds Act, 1909, the question of a station for scientific research in relation to agriculture, re-afforestation, the sugar beet industry, arterial drainage, horsebreeding in the North of Ireland, and the need for encouraging the breeding of horses of the Irish draught type.

The sixteenth and seventeenth meetings of the Council were held as usual in the University Buildings, Earlsfort Terrace, where, through the courtesy of the Senate of the University, the necessary accommodation was placed at the disposal of the Department.

The eighteenth meeting of the Council was held on the 19th October, 1910. On this occasion the meeting was held in the Lecture Theatre of the Royal Dublin Society, Leinster House, Kildare Street, Dublin, by kind permission of the Council of the Society. At this meeting the hands of a Bill to promote the Irish

dairying industry were discussed, amended, and approved. The Council had also under consideration the Report of the Vice-regal Commission on Irish Railways; the question of grants from the funds at the disposal of the Development Commission for Irish forestry, horsebreeding, scientific research and fisheries; the Woods and Agricultural Seeds (Ireland) Act, 1909; potato spraying; arterial drainage, and certain diseases of live stock.

A summary of the proceedings of each meeting of the Council, together with the Vice-President's Address, was published in the Department's *Journal*.\*

THE AGRICULTURAL BOARD. The Agricultural Board in the year 1909-10 consisted of the following members:—

Name.	Address.	By whom appointed.
Daly, Very Rev. Canon, D.D.	Diocesan College, Ballyhaden, Co. Mayo.	Connacht Provincial Committee.
Downes, Robert, J.P.,	Russellstown, Mullingar.	Leinster Provincial Committee.
Everard, Col. Nugent T., H.M.L.	Randlettstown, Navan, Co. Meath.	The Department.
Gore-Booth, Sir Joselyn, Bart., D.L.	Lisadell, Sligo.	The Department.
Healy, His Grace the Most Rev. John, D.D., Lord Archbishop of Tuam.	St. Jarlath's, Tuam, Co. Galway.	Connacht Provincial Committee.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross.	Bishop's House, Skibbereen, Co. Cork.	Munster Provincial Committee.
McCance, John S. F., J.P.	Woodbourne, Dunmurry, Co. Antrim.	Ulster Provincial Committee.
McDonald, William, J.P.	Laharan, Milsane Bridge, Carrigaline, Co. Cork.	Munster Provincial Committee.
Monteagle, The Right Hon. Lord, K.P., D.L.	Mount Trenchard, Foyens, Co. Limerick.	The Department.
Montgomery, H. de F., D.L.	Blessingbourne, Five-miletown, Co. Tyrone.	Ulster Provincial Committee.
Murraghan, George, J.P.	Lisnally House, Omagh, Co. Tyrone.	The Department.
O'Neill, Patrick J., J.P.	Kinsely House, Malahide, Co. Dublin.	Leinster Provincial Committee.

The Agricultural Board meet at the Offices of the Department, Upper Merrion Street, Dublin. The funds controlled by the Agricultural Board are set forth on page 8. The schemes and operations of the Department that are explained in detail in the section of this report which deals with Agriculture, have all been undertaken with the advice and concurrence of the Board.

\* See *Journal*, Vol. X., Nos. 2: 4; pp 267, 607 Vol. XI., No. 1, p. 2.

THE BOARD OF  
TECHNICAL  
INSTRUCTION.

The Board of Technical Instruction in the year 1909-10 consisted of the following members:—

Name.	Address.	By whom appointed.
Barbour, Frank.	Annesbrook, Mullingar, Co. Westmeath.	Ulster Provincial Com- mittee.
Clancy, Most Rev. John, D.D., Lord Bishop of Elphin.	St. Mary's, Sligo.	Connacht Provincial Committee.
Crozier, James, J.P., V.S.	26, Montpelier Hill, Dublin.	Dublin County Borough Council.
Dickson, Alexander.	15, Parliament-street, Dublin.	Dublin County Borough Council.
Donnellan, Alderman Thomas.	Limerick.	Limerick County Borough Council.
Dunn, Christopher J., J.P.	1, Mount Vendon-terrace, Wellington-road, Cork.	The Department.
Evans, Rev. Henry, D.D., M.R.I.A., F.R.H.	St. Helen's, Blackrock, Co. Dublin.	Commissioners of Na- tional Education.
Finlay, Rev. T. A., M.A.,	33, Lower Leeson-street, Dublin.	Leinster Provincial Com- mittee.
Glynn, Joseph A., B.A.,	Beech House, Tuam, Co. Galway.	The Department.
Good, John.	The Moorings, Merrion- road, Dublin.	Joint Committee of Coun- cils of the Co. Dublin Urban Districts.
Henderson, Sir James, A.M., D.L.	Oakley House, Windsor- park, Belfast.	The Department.
Johnston, Sir John Barr, J.P.	Londonderry.	Londonderry County Borough Council.
Macartney, William, J.P.,	33, Cliftonville-rd., Bel- fast.	Belfast County Borough Council.
McClelland, John A., M.A., D.Sc., F.R.S.	Rosetraver, Orwell Road, Rathgar, Co. Dublin.	The Department.
Morrier, Alderman Samuel T., J.P.	2, Mount Clifton, Clif- tonville-road, Belfast.	Belfast County Borough Council.
O'Connell, Seaghan T.	8, Belvedere-avenue, Dublin.	Dublin County Borough Council.
Power, Thomas.	Dungarvan, Co. Water- ford.	Munster Provincial Com- mittee.
Sheehan, Most Rev. Richard A., D.D., Lord Bishop of Waterford and Lismore.	Bishop's House, John's Hill, Waterford.	Waterford County Borough Council.
Sisk, Richard.	Evergreen-villas, Cork.	Cork County Borough Council.
Starkie, William J. M., M.A., Litt.D.	Tyrone House, Marl- borough-street, Dublin.	Intermediate Education Board.
Taylor, Alexander.	131, Donegall-street, Bel- fast.	Belfast County Borough Council.

The Department regret to have to record the death in April, 1910, of Mr. William R. J. Molloy, J.P., M.B.I.A., one of the Commissioners of National Education in Ireland. Mr. Molloy was a member of the Board of Technical Instruction since April, 1908, being the representative appointed by the Commissioners of National Education. The Commissioners appointed Reverend Henry Evans, D.D., M.B.I.A., F.I.H., to fill the vacancy caused by the death of Mr. Molloy.

As explained in the Ninth Annual General Report, the annual sum of £55,000 as provided by Section 16 (1) (c) of the Act of 1899 was allocated by the Department with the concurrence of the Board of Technical Instruction for the triennial period ending 31st March, 1912, as follows:—

For Technical Instruction in County Boroughs	£26,000
For Technical Instruction elsewhere than in County Boroughs, and for central purposes	£29,000

The Board, therefore, control the expenditure of an annual sum of £29,000, which is applicable for technical instruction elsewhere than in County Boroughs, and for certain central purposes. The balance of the £55,000, viz., £26,000, allocated, with the concurrence of the Board, for technical instruction in the six county boroughs, is applied in aid of schemes in these boroughs subject to the approval of the Department alone. Out of the sum of £29,000 referred to, the Department, with the concurrence of the Board, set aside an annual sum of £4,000 for central purposes, e.g., for Senior Scholarship schemes, provision for training teachers, &c. The remaining £25,000 is distributed in aid of approved schemes of technical instruction in urban and county districts. Details of these schemes will be found in Part II. of the present report, under the head of "Technical Instruction."

As the funds available for the ordinary subjects of technical instruction are all needed for the urban schemes, the Department again found it necessary to ask the Agricultural Board to allocate a sum of £9,000 out of the funds administered with the concurrence of that Board, for Manual Instruction and Domestic Economy classes in rural districts. Such classes are regarded as part of the general scheme of agricultural education, but, for administrative reasons, the Department have hitherto found it convenient to administer this sum with the concurrence of the Board of Technical Instruction. Classes in lace and crochet-making, and other rural industries, are also financed from the Agricultural surplus, the amount voted in 1909-10 for this special purpose being £3,000.

The Consultative Committee for co-ordinating educational administration, as constituted by Section 23 of the Act of 1899, consists of the Vice-President of the Department as Chairman, and one person appointed by each of the following bodies:—The Commissioners of National Education, the Intermediate Education Board; the Agricultural Board, and the Board of Technical Instruction.

THE CONSULTATIVE  
COMMITTEE  
OF EDUCATION.

The Committee in 1909-10 consisted of the following members:—

Name.	Address.	By whom appointed.
The Right Hon. T. W. Russell, Vice-President of the Department.	Department of Agriculture and Technical Instruction, Dublin.	Ex-officio.
William J. M. Starkie, M.A., Litt.D.	Tyrone House, Marlborough-street, Dublin.	Commissioners of National Education.
Rev. T. A. Finlay, M.A.	35, Lower Leeson-street, Dublin.	Intermediate Education Board.
John A. McClelland, M.A., D.Sc., F.R.S.	Rosevear, Orwell-road, Rathgar, Co. Dublin.	Board of Technical Instruction.
T. P. G. H.	Department of Agriculture and Technical Instruction, Dublin.	Agricultural Board.]

## 2.—FUNDS OF THE DEPARTMENT.

### (a.) *Parliamentary Vote.*

In the Parliamentary Vote for the Department for 1909-10, provision was made for the salaries and other expenses in connection with the institutions and officers transferred from other Departments under Section 2 of the Agriculture and Technical Instruction (Ireland) Act of 1899, as well as for the salaries and expenses of officers appointed since 1st April, 1900. The Vote also contained the following grants-in-aid:—Cattle Pleuro-Pneumonia Account, including the grant for Swine Fever and Rabies work, £10,200; Congested Districts Board, £58,709; provision for agricultural purposes under Section 15 of the Act of 1899 and Section 49 of the Irish Land Act, 1909, £22,425 (this sum forms part of the Endowment Fund); provision for the purchase of specimens for the National Museum of Science and Art, £2,900; books for the National Library of Ireland, £1,900; and apparatus for the Royal College of Science, £1,500.

The Parliamentary Vote also contained the grants for Science and Art Instruction in Ireland, payable to schools which adopt the Department's programme for Experimental Science, Drawing, Manual Instruction, and Domestic Economy. The provision made for these purposes was £48,750, an increase of £5,150 on the corresponding provision for the previous year.

The expenditure in respect of the institutions maintained from the Parliamentary Vote during the year 1909-10 was as follows:—

Royal College of Science, . . . . .	£16,097
National Museum of Science and Art, . . . . .	13,568
National Library of Ireland, . . . . .	8,477
Metropolitan School of Art, . . . . .	6,360
Royal Botanic Gardens, . . . . .	4,038

£44,138



The Geological Survey of Ireland was transferred, as from 1st April, 1905, from the Board of Education, England, to the Department. The expenditure on the survey in 1909-10 was £2,215.

(b.) *Endowment Fund.*

During the year ended 31st March, 1910, the whole of the Department's Annual Endowment Fund provided under the Agriculture and Technical Instruction (Ireland) Act, 1899, viz., £166,000, was duly received, together with a further annual sum of £5,000 under the terms of the Agriculture and Technical Instruction (Ireland) Act, No. 2, 1902. The latter sum was formerly payable to the Royal Dublin Society, under the Probate Duties (Scotland and Ireland) Act, 1888, for the improvement of the breeds of horses and cattle. There was also received a contribution of £7,000 from the Ireland Development Grant, earmarked for the purposes of Technical Instruction, £1,594 from the Congested Districts Board in respect of agricultural schemes in congested districts, the work in connection with which was provisionally transferred to the Department in the year 1903, and £4,425 under Section 49 of the Irish Land Act, 1909. The amount received as interest arising out of securities held by the Department, and from moneys on deposit in the Bank of Ireland, was £9,034, and the interest received from loans for bulls, stallions, agricultural banks, etc., was £715.

(c.) *The General Cattle Diseases Fund.*

The General Cattle Diseases Fund was formed under the Contagious Diseases (Animals) Act of 1878 by assessment on the several Poor Law Unions in Ireland, mainly for the purpose of recouping to local authorities one-half of the expenditure incurred by them under the Diseases of Animals Acts, thus lessening the burden which might otherwise press unduly on particular localities, owing to the prevalence therein of contagious diseases of animals. It is also drawn upon to supplement the annual Grant-in-Aid of the Cattle Pleuro-Pneumonia Account in any year in which that grant proves insufficient to meet the expenditure of the central authority in dealing with pleuro-pneumonia, foot and mouth disease, rabies, and swine fever.

The Fund is replenished by assessments on the several counties and county boroughs in proportion to the net annual value of property therein. The total amount which may be levied on the several contributing bodies for the purposes of the Fund is limited by the Diseases of Animals Act of 1894 to a sum which, taken with any money carried to the Cattle Plague Account before the 30th September, 1878, is equivalent to a poundage of 8d. in the pound; and no larger sum may be levied at any one time than the equivalent of  $\frac{1}{4}$ d. in the pound. Since the inception of the Fund, a sum equivalent to a poundage rate of 6 $\frac{3}{4}$ d. in the pound has been levied in twenty-six assessments, the last of which was dated the sixth of December, 1910. An assessment at the rate of  $\frac{1}{4}$ d. in the pound now yields approximately £16,350, and this sum would cover the normal expenditure, exclusive of

expenditure on swine fever work in excess of the Parliamentary Grant, for a period of about two years.

A proportion of the fines recovered in prosecutions for offences under the Diseases of Animals Acts is also carried to the credit of the General Cattle Diseases Fund, and the amount thus realised covers certain miscellaneous expenses of the central authority, such as the expenses incurred in the examination of carcases washed ashore, etc., with which the Fund is also chargeable under Section 72 (4) of the Diseases of Animals Act of 1894.

### 3.—ADMINISTRATION OF THE ENDOWMENT FUND.

The Department's Endowment Fund at present consists of an annual income of £166,000 under the Agriculture and Technical Instruction (Ireland) Act of 1899, £5,000 under the Agriculture and Technical Instruction (Ireland) Act, No. 2 of 1902, £19,000 under Section 49 of the Irish Land Act of 1909, and £7,000 from the Ireland Development Grant. From the total, amounting to £197,000, a sum of £62,000 has to be set aside for the purposes of technical instruction, and £10,000 for sea fisheries. A provision of about £1,000 a year has also to be made for the payment of the superannuation allowances of certain persons formerly employed under the Commissioners of National Education, and for the travelling expenses of members of the Council of Agriculture, and of the two Boards established by the Act of 1899.

When the sums mentioned have been set aside for these purposes, the balance, amounting to £124,000, constitutes the annual sum applicable for "the purposes of agriculture and other rural industries, and sea fisheries." In addition to this annual income, certain capital sums, amounting in all to £204,906, were placed at the disposal of the Department under Section 15 (e) and (g) of the Act of 1899. These sums and the unexpended balances of the annual income of the Endowment Fund during the initial years of the Department's existence were invested in Government securities. The nominal or face value of the securities held on 31st March, 1910, including £20,000 Consols transferred from the Board of Works to the Department in April, 1904, in respect of the Sea and Coast Fisheries Loan Fund, was £276,446, and their cash value was £246,759. A further sum of £25,000 was on temporary deposit in the Bank of Ireland.

The liabilities on the total amount of £281,759 in respect of sums specifically ear-marked under Section 16 of the Act of 1899, were as follows:—For technical instruction in the six county boroughs, £32,285; for technical instruction in urban and rural districts, £10,824; for extension of special schemes of technical instruction, £11,855;

LIABILITIES ON  
THE AMOUNT  
INVESTED.

for sea fisheries, £10,982; for the Sea and Coast Fisheries Loan Fund, £13,614; Steam Cruiser and Dredger replacement funds, £9,642; insurance fund for motor fishing boats, £1,000; and for the buildings and equipment of the Munster Institute, an unexpended balance of £1,754 out of £10,000 provided under the Act of 1899. The total amount of these liabilities was, therefore, £91,956 on 31st March, 1910.

Deducting the liabilities from the sum of £281,759, there remained a sum of £189,806 available for the purposes of agriculture and other rural industries, and sea and inland fisheries. The latter sum has been allocated, with the concurrence of the Agricultural Board, for various undertakings, such as the purchase of additional land in connection with the Agricultural Colleges and Stations of the Department, the building and equipment of agricultural schools, loans to Agricultural Credit Societies, loans for the erection of fencing, the purchase of bulls and stallions, etc., marine works, and the protection and development of sea and inland fisheries.

The net expenditure on the agricultural side of the Department's work in 1909-10, including the grant of £9,000 for the purpose of providing instruction in manual work and domestic economy in rural districts, was £117,778. The details of the expenditure are shown in the Appendices, pages 166-7.

Under Section 16 (c) of the Agriculture and Technical Instruction (Ireland) Act of 1899 an annual sum of £55,000, allocated for the purposes of technical instruction, is to be divided into two parts, one part of which (£26,000 for the three years ending 1911-12) is distributable, in proportion to their respective populations, among the county boroughs in aid of approved schemes of technical instruction, and the other part (£29,000) for schemes of technical instruction elsewhere than in county boroughs, and for certain other purposes mentioned in the Act, such as the collection of information for the purposes of technical instruction.

The grant in aid of technical instruction for 1909-10, commonly known as the "Equivalent Grant," was duly received from the Ireland Development Grant, and amounted to £27,000.

A grant of £9,000 for the purposes of instruction in manual work and domestic economy in rural districts was made from the funds administered by the Agricultural Board.

The total of the sums available in 1909-10 for technical instruction in non-agricultural subjects was £72,182, exclusive of the balance of £74,192 brought forward from the year 1908-9. The expenditure was £91,410, of which £41,384 was paid to the county boroughs. The amount of the balance carried forward to the year 1910-11 was £54,964, and comprised £32,385, accrued in respect of technical instruction schemes in county boroughs, and £22,679 ear-marked, as stated above, for schemes in urban districts and the extension of special schemes, such as the establishment of trade preparatory schools, special courses of instruction for masters and foremen in trades, and summer

courses for teachers of elementary science, drawing, manual instruction, and domestic economy.

Under Section 16 (d) of the Act a provision of £10,000 is to be made each year for the purposes of sea fisheries.

**FUNDS FOR FISHERY PURPOSES.** The total sum available for these purposes in 1909-10, including the balance carried forward from 1908-9, and sundry receipts, was £28,181. The gross expenditure was £12,149, of which £677 was spent on marine works and dredging carried out at Arklow, Hoobawns, and Ballintoy. Further information regarding these and other marine works, the patrol of the fishing grounds, and the investigations carried on at the marine laboratory and oyster beds at Ardfray, the cost of which is defrayed from this fund, is given in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

The portion of the Sea and Coast Fisheries Fund reserved by the Purchase of Land (Ireland) Act, 1891, for expenditure elsewhere than in Congested Districts counties, which remained vested in the Commissioners of Public Works, was transferred to the Department under an Order in Council dated 24th March, 1904, in accordance with the terms of Section 15 (c) of the Agriculture and Technical Instruction (Ireland) Act, 1899.

The Sea and Coast Fisheries Fund was the residue of a sum collected by public subscription for the relief of distress in Ireland in the year 1822. This sum was vested in trustees known as the "Trustees to aid Sea and Coast Fisheries of Ireland." By the Act 47 and 48 Vic., c. 21, the fund was transferred to the Commissioners of Public Works, who were authorised to make fishery loans therefrom to such persons, and upon such security, as the Inspectors of Irish Fisheries should recommend. By the Purchase of Land (Ireland) Act, 1891, (54 and 55 Vic., c. 48), the fund was transferred to the Congested Districts Board, save £20,000, which was reserved for the purpose of loans in non-congested districts under the same terms as obtained before the passing of that Act.

By the Agriculture and Technical Instruction (Ireland) Act, 1899, this sum of £20,000—or what it was then represented by in cash, investments and outstanding loans—was placed at the disposal of the Department. It was not, however, actually transferred until 1st April, 1904, when the Department received from the Commissioners of Public Works £1,521 19s. 6d. in cash, £20,000 in Consols, and promissory notes to the amount of £7,700, inclusive of arrears and irrecoverable balances.

It has been found to be unnecessary to keep the whole of this fund separate for the sole purpose of making loans to fishermen. A substantial part of it has, however, been reserved for that purpose, the balance being allocated to the furtherance of other objects in connection with sea fisheries.

During the period of fifteen months ended 31st March, 1910, one hundred and fifty-one applications for new loans were favourably considered by the Department, and a sum of £5,680 was issued for the purchase and repair of fishing boats and gear. The manner in which these loans are repaid continues to be satisfactory. The details of the transactions are published in the Department's Annual Report on the Sea and Inland Fisheries of Ireland.

#### 4.—CENTRAL INSTITUTIONS.

The Forty-second Annual Report of the Dean and Council of the Royal College of Science will be found in the Appendices, page 391.

ROYAL COLLEGE OF SCIENCE. The number of students attending the College during the Session 1909-10 was 126, of whom 92 were Associate Students and 26 were Non-Associate Students. These included four Royal Scholars, fifteen Science Scholars, thirty Agricultural Scholars (including two in Horticulture and one in Forestry), and fourteen Teachers-in-Training. In addition there were one Local Exhibitioner, one Special Research Student, four Post-Graduate Students, and two Free Students attending Special Courses.

The College has been utilised as the chief centre for the short summer courses of instruction which the Department organise each year mainly for the further training of teachers working under their programme of Experimental Science, Drawing and Manual Instruction for day secondary schools. In 1910 these summer courses were held at 28 centres, with an attendance of 621. Of this number 209 attended the courses at the Royal College of Science.

The Chair of Engineering became vacant at the beginning of the Session 1909-10 by the death of Professor James Lyon, M.A. Mr. H. H. Jeffcott, B.A., B.A.I., M.I.Mech.E., Ex-Scholar and Senior Moderator, Trinity College, Dublin, who was Head of the Metrology Department of the National Physical Laboratory, Teddington, was appointed to fill the vacancy.

In the Department's last Annual Report it was stated that the Dublin Commissioners appointed under the Irish Universities Act, 1908, had invited the Department to express their views on the question of the co-ordination of the technological work, including agriculture, of the Royal College of Science with that of the National University. It was also indicated that as a result of an interchange of views on the matter the Commissioners had included in the Statutes issued by them a provision enabling the Senate of the University to confer with the Department in regard to a scheme of co-ordination, whereby unnecessary duplication of teaching and equipment in the technological subjects dealt with in the Royal College of Science would be avoided. The question will be further dealt with by the Senate and by the Department, and it seems probable that satisfactory arrangements for co-ordination will be agreed upon.

The Belfast University Commissioners had also approached the Department on the question of possible co-ordination between the Queen's University of Belfast and the Royal College of Science. The Department expressed their willingness to co-operate with the Queen's University in this way, and consultations between them and the authorities of the University have taken place, with the result that the Belfast University Commissioners have made a Statute giving power to the University to arrange this co-ordination in respect of such subjects as may be considered desirable.

A brief account of the Royal College of Science was given in the Ninth Annual General Report of the Department. In view of further possible developments in the direction of co-ordination with the three Universities that now exist in Ireland, it may be useful again to give a summary of the work of the College.

The teaching staff of the Royal College of Science at present consists of eight Professors, five Lecturers, and ten Assistants, and the subjects of instruction are:—Mathematics, Mathematical Physics, Chemistry, Mineralogy, Assaying, Experimental Physics, Electro-Technology, Mechanical Engineering, Agriculture (including Agricultural Chemistry, Agricultural Botany, Agricultural Economics, Agricultural Bacteriology and Veterinary Hygiene), Geology, Botany and Zoology. The Albert Farm, Glasnevin, which is also under the control of the Department, is used in connection with the instruction in Agriculture in the College, and this instruction has been correlated with that given at the Albert Agricultural College. Similarly, the Department's Forestry Station at Avondale and their other woods and plantations are available for instruction in Forestry, as are also the Royal Botanic Gardens, Glasnevin, for the course in Horticulture, both of which courses are included in the Faculty of Agriculture.

The College is maintained by the provision made in the annual Parliamentary Vote, the students' fees being appropriated in aid of the Vote. In the year 1909-10, the net cost of the College (exclusive of the cost of maintenance of buildings, furniture and lighting, which is defrayed by the Board of Public Works, and of stationery, printing, etc., defrayed by the Stationery Office) was approximately £16,100.

The fees payable by Associate students are £15 for the first year, £20 for the second year, and £20 for the third year. These fees cover attendance at all lectures and laboratory and workshop courses, as well as the use of the College apparatus and materials. For Non-Associate students the fee for any course of lectures is £2, while for such students the fees for practical courses vary from £2 for a special course of one month to £12 for the entire session.

A number of scholarships and "teacherships-in-training" are provided in connection with the College. Some of these have been instituted by the Department principally with a view to training instructors for service under the Department's schemes.

In the Agricultural Faculty about fifteen scholarships are offered each year for competition among young Irishmen who desire to acquire a thorough knowledge of technical agriculture; and scholarships are also provided for students who intend to specialise in horticulture, forestry, or cemetery management. Each of these scholarships includes free admission to the first year's course of instruction in the College; and either of the following at the option of the Department:—(a) a maintenance allowance of one guinea per week while in attendance at the College or elsewhere as the Department may decide, or (b) free board and residence at the Albert Agricultural College, or other of the Department's institutions. A scholarship is tenable, in the first instance, for one year, but selected candidates must undergo a probationary course of one term. If satisfactory progress be made by the holder, the scholarship may be renewed for a second and for a third year to enable the student to complete his course. Since these scholarships were instituted 64 scholars in the Faculty

of Agriculture have been trained as agricultural experts, and of these 53 are now employed in Ireland in various capacities in connection with the Department's work.

In addition to the scholarships in the Faculty of Agriculture, five scholarships in science and technology and five "teacherships-in-training" are awarded annually. The scholarships include a maintenance allowance of £50 per annum, and free instruction during the Associate course. A "teachership-in-training" entitles the holder to free instruction during the Associate course and to a maintenance allowance of 21s. a week during the session. Candidates awarded "teacherships-in-training" are required to enter into an undertaking that they will pursue the full Associate course with a view to becoming teachers of science in Ireland.

Other scholarships, as well as medals and prizes, are also offered for competition. For instance, four Royal Scholarships of £50 each for two years, with free tuition, are attached to the College; two are offered for competition each year among Associate students who are completing their first year course, who are not holders of Royal Exhibitions, National, Whitworth, Agricultural, or Science and Technological Scholarships, or Scholarships or Exhibitions awarded by Local Technical Instruction Committees. The Royal Scholarships are awarded on the results of the seasonal examinations of the first year Associate course; but, in order to qualify for them, a student must have attended regularly the lectures and demonstrations, and have passed in all the subjects of the first year. Scholarships are not awarded unless sufficient merit is shown. Holders of the scholarships are required to attend with strict regularity all the courses in the second and third years, and to pass all the College examinations in the faculty or group in which they are seeking a diploma. Certain other scholarships and prizes, such as "Royal Exhibitions," and "National Scholarships," which are open for competition at the annual examinations of the Board of Education, Whitehall, are also tenable at the College. Full particulars regarding the scholarships, prizes, and medals are given in the Programme of the College.

The new buildings for the College, which are being erected under the direction of the Commissioners of Public Works, adjoining Upper Merrion Street, are almost completed, and the necessary equipment will be installed immediately. Mechanical Engineering Schools, including laboratory, workshops, drawing office, smithy, foundry, etc., will form an adjunct to the main structure. The Department hope that the new College will be in full working order by the commencement of the Session, 1911-1912.

In the Irish Antiquities Division of the National Museum the collection has been increased by the addition of 105 objects, 47 of which were deposited by the Royal Irish Academy, and 58 were added to the collection by direct purchase. Some casts of antiquities moulded by the Museum staff were also added to this division. The arrangement of the west crypt has been proceeded with, and all the canoes, and most of the Ogham inscribed stones, have been placed therein. These, together with the bronze pots, querns, a large collection of early ecclesiastical tiles, and a collection of pikeheads, form an exhibit of much interest.

In the Art and Industrial Division the lighting of the Ethnological Room, No. III., has been much improved. The collections have been enriched by the purchase of a considerable number of objects, including a very fine Irish chalice. The valuable private collection of pottery, porcelain, glass, etc., made by the late Mr.

T. H. Longfield, F.S.A., for many years Keeper of this division of the Museum, has also been purchased.

In the circulation division, 48 new cases and frames of objects were prepared, including 18 cases of agricultural specimens sent to the Department's Agricultural Station at Ballyhaise and 17 sent to the Agricultural Station at Clonakilty. There are now 318 cases and frames available for issue to schools. There were 589 issues during the year.

In the Natural History Division, Zoological Section, owing to the alterations in the building consequent on the removal of the old porch and the provision of a new entrance into this portion of the Museum, it became necessary to re-arrange the entire lower room. Advantage has been taken of this opportunity to re-classify the Irish collection by bringing together the recent and fossil forms. This work has been commenced and will be well advanced before the end of next year.

In the Botanical section the re-arrangement of the Economic collection has been begun, and a number of specimens from Java, Samoa and Hawaii are in process of incorporation.

In the Mineralogical section, the Irish minerals have been transferred from the curved gallery to Annexe Room III.

There has been a considerable increase in the number of students making use of the Natural History and Botanical collections.

The attendance of readers at the National Library of Ireland during the year has been 189,266, being an increase of 670 over that of last year. This appears to be principally due to the Library having been opened three days more in 1909-10 than in 1908-9. The number of volumes added to the Library and made accessible to readers during the year was 5,970. The Author Catalogue for the year 1906-7 has been printed off and issued during the year. The printing of the Decennial Subject Index, 1894-1903, is far advanced, and the preparation of the Septennial Index, 1904-1910, is now in progress. Many important donations have been received, notably those from Mrs. Henniker Heaton, being portion of the library of the late Sir John Banks, and a second gift from the Royal College of Physicians in Ireland supplementing that referred to in last year's report.

The Session 1909-10 at the Metropolitan School of Art was in every respect a satisfactory one. Although there was a slight decrease in the number of students enrolled—391 as compared with 417 in the previous Session—there was an increase in the number of examination successes secured. In the National Competition the number of awards secured by students of the School totalled 37 as against 22 in 1909; the awards in 1910 included one Silver Medal, four Bronze Medals, eight Book Prizes, and twenty-four Commendations. In connection with the School of Art Courses the Department arranged with Professor Bereafoord Pitt, F.R.I.B.A., to deliver, during the month



of July, a public course of three lectures on the subject of "Architectural Education." These lectures were largely attended and much appreciated.

The Royal Botanic Gardens were well maintained during the year and, while no important changes were made, many necessary repairs were carried out in the various buildings and glass-houses. In the outdoor department improvements were made in the Arboretum and Pinetum; and the re-making and re-planting of the old rock work was continued. Some damage was done to trees and shrubs by a heavy fall of snow in February, 1910, and the severe frost that accompanied it was destructive to some tender shrubs which had stood out for several years uninjured.

The chief work of the Geological Survey of Ireland in the year 1909-10 consisted in carrying on the survey of a number of areas in the north-west of Ireland of which no maps had ever been prepared upon the six-inch scale. An investigation was made as to the geology of Clare Island, with a view to the publication of a map showing the surface-deposits in a region of much scientific interest. Memoirs, including coloured geological maps, were published on the rocks dredged from the Atlantic by the Department's Fishery Survey, and on the geological features and soils of the Department's Agricultural Station at Ballyhaise.

Particulars regarding the year's work in the Royal College of Science, the National Museum of Science and Art, the National Library, the Metropolitan School of Art, the Royal Botanic Gardens, and the Geological Survey of Ireland are given in the Appendices. The Report of the Board of Visitors of the National Museum and the Royal Botanic Gardens is printed at page 467, and the Report of the Council of Trustees of the National Library at page 477.

## 5.—MISCELLANEOUS.

The Irish Land Act, 1909, which came into operation on 6th January, 1910, contained the following clauses affecting the Department:—

### TRUSTEES FOR PURPOSES OF TURBARY, PASTURES, &c.

"18. (1.) It shall be lawful for the Department of Agriculture and Technical Instruction for Ireland, or the council of any county or of any rural district, to purchase any parcel of an estate under section 4 of the Act of 1903 for any of the purposes mentioned in that section,\*

\* The purposes mentioned in Section 4 of the Irish Land Act, 1903, are:—Turbary, pasturage, the raising of sand or gravel, the cutting or gathering of sea weed, the planting of trees, or the preservation of game, fish, woods or plantations, or for the purposes of the Labourers (Ireland) Acts, 1883 to 1896, as amended by the Land Act of 1903.

and the said Department or any such council, or any other body corporate having power to acquire land, may act as trustees for those purposes, and may obtain advances for the purchase.

"(2.) Where any land is purchased by the said Department or a county council or rural district council under this section, the scheme for the use of the land mentioned in section 29 of the Act of 1903 shall be framed or approved of by the Department and the requirements of that section with regard to the framing or approval of the scheme by the Lord Lieutenant shall not apply."

#### THE CUTTING OF TREES ON HOLDINGS.

"32. (1.) (b.) The proprietor shall not, without the consent in writing in the prescribed form of the Department of Agriculture and Technical Instruction for Ireland, cut down or uproot, or permit to be cut down or uprooted, any tree (other than a fruit tree or osier) upon the holding which is necessary for the ornament or shelter of the holding; and, if any such tree is cut down or uprooted in violation of this condition, the proprietor shall be guilty of an offence under this Act, and shall be liable on summary conviction to a penalty not exceeding five pounds for each tree so cut down or uprooted, unless he satisfies the Court that he received the prescribed consent."

#### TRANSFER OF CERTAIN POWERS AND DUTIES TO THE DEPARTMENT OF AGRICULTURE.

"47. The powers and duties of the Congested Districts Board under any enactment, so far as they relate to any of the following matters; namely:—

- (a.) The provision of seed potatoes or seed oats;
- (b.) Agricultural instruction or practical husbandry; or
- (c.) The aiding and developing of forestry or the breeding of live stock or poultry;

shall on the appointed day be transferred to the Department of Agriculture and Technical Instruction for Ireland (in this Part of this Act referred to as the Department) and shall from that day cease to be exercised or performed by the Board."

#### CONSULTATIVE COMMITTEE FOR PURPOSES OF FISHERIES.

"48. For the purpose of advising the Department and the Congested Districts Board with a view to the co-ordination of the administration of the business of the Department and the Board respectively in relation to the aiding and developing of sea fisheries in areas in which they have concurrent powers or duties, there shall be a consultative committee consisting of six members, of whom three shall be nominated by the Department, and three shall be nominated by the Board."

#### PROVISION OF MONEY FOR THE DEPARTMENT OF AGRICULTURE.

"49. As from the appointed day, an annual sum of one hundred and sixty-three thousand seven hundred and fifty pounds shall be paid out of moneys provided by Parliament, as follows:—

Out of that sum an annual sum of nineteen thousand pounds shall be paid to the Department for the purpose of the exercise of the powers and the performance of the duties transferred to the Department under this Act, and the residue shall be paid to the Congested Districts Board.

"Provided that at any time after the expiration of five years from the appointed day the Lord Lieutenant may, on the application of the Department or the Board, from time to time direct that the amount payable to the Department for the purpose aforesaid shall be increased or reduced, and the increased or reduced amount shall as from the date fixed by the Lord Lieutenant be the amount payable to the Department under this section."

The arrangements made by the Department for carrying out the new duties imposed upon them under the foregoing clauses, will be referred to in later sections of the Report.

In the Ninth Annual Report reference was made to the appointment of a Departmental Committee on the Irish Butter Industry. The Committee consisted of the following members:—

- JOHN RITCH CAMPBELL, Esq., B.Sc., Assistant Secretary in respect of Agriculture of the Department of Agriculture and Technical Instruction for Ireland (Chairman);  
 Professor THOMAS CARROLL, M.Sc., Agricultural Inspector of the Department of Agriculture and Technical Instruction for Ireland;  
 E. G. HATGAUTH BROWN, Esq., Superintending Inspector of the Board of Agriculture and Fisheries;  
 The Right Hon. the EARL OF CARRICK, Inspector for Irish Produce in Great Britain of the Department of Agriculture and Technical Instruction for Ireland;  
 A. POOLE WILSON, Esq., Inspector of Dairying of the Department of Agriculture and Technical Instruction for Ireland.

The terms of reference to the Committee were:—

"To inquire into and interpret the principal forms of trade description (as defined by Section 3 of the Merchandise Marks Act, 1887) at present applied, in the United Kingdom, to different grades of butter; and to suggest what additional measures, if any, it is desirable for the Department to take in the interests of the Irish butter industry, with special reference to the prevention of loss or injury to the industry from the use of false trade descriptions."

The Committee having heard evidence at the principal centres of the butter trade in Great Britain as well as in Ireland, submitted their Report to the Department in March, 1910. The Report was then presented to Parliament, and the Department brought it to the notice of the Trade Associations and other bodies concerned in the Irish Dairying Industry. The conclusions of the Committee in regard to trade descriptions have been favourably received by all sections of the trade in Great Britain and Ireland. One of the principal objects of the inquiry was to settle the definition of the term "Creamery Butter." The clear definition of this term which the inquiry has established should, in itself, be of much assistance in obtaining convictions under the Merchandise Marks Act in the case of butter falsely described as "Irish Creamery Butter."

The Committee recommended legislation to enable the Department to safeguard the interests of the industry. Since the publication of the Report the necessity for such legislation has been generally recognised, although some opposition was created by certain misconceptions and misrepresentations of the scope of the proposed legislation. The Department, having considered the Report and received deputations from various bodies interested, submitted to the Council of Agriculture at their meeting on the 19th October, 1910, a preliminary Draft of a Bill based upon the recommendations of the Committee. The Draft was discussed section by

section and was approved subject to some amendments. The Department subsequently received further deputations from bodies connected with the industry with a view to the introduction of the Bill into Parliament at the first suitable opportunity. The main lines of the Department's proposals are described in the preamble to the Draft Bill as follows:—

"To promote the interests of the Irish dairying industry by making provision for (1) the registration for certain purposes of creameries and auxiliary creameries; (2) safeguarding the dairying industry against loss or injury from the use of false trade descriptions; (3) securing cleanliness in milk supplied to creameries, auxiliary creameries, and other premises where milk is received to be commingled with the milk of other suppliers for manufacture into articles of food for human consumption, and (4) securing cleanliness in butter sold as an article of food for human consumption."

The Bill is drafted principally for the purpose of enhancing the reputation of Irish creamery butter on the markets by establishing confidence among merchants as to the genuineness of butter so described, by providing penalties and facilitating convictions in cases of misdescription of factory or other butters as Irish creamery butter, and by securing, as far as practicable, the purity of the milk supplied to Irish creameries. The terms "Creamery," "Auxiliary Creamery," and "Creamery Butter" are defined, and a clear distinction is set up between the creamery and the butter factory, and between creamery butter and factory butter, while a system of Governmental inspection of creameries is proposed solely for the purpose of securing that these distinctions are observed and that butter consigned from Irish creameries is properly described. The Bill, which is concerned with the interests of the industry and not with the public health, does not provide any regulations to be observed by milk suppliers and manufacturers of butter such as are required in the interests of the public health under the Dairies, Cowsheds, and Milkshops Order; but, as the Committee reported that the general interests of the industry are at present very injuriously affected by the culpable negligence of some suppliers of milk to creameries, and suppliers of butter to butter factories, the Bill proposes to make it an offence to supply milk or butter which is so dirty as to indicate culpable carelessness in its preparation.

The recommendations of the Committee which do not require legislation are receiving careful consideration.

The Department for some time have had under consideration the question of agricultural credit available for the rural classes in Ireland with a view to seeing what improvements should be made in the existing system, having special regard to the form of agricultural credit most suitable to the requirements of the occupiers of land affected by the Land Acts in the western districts and throughout the country generally. The first part of the problem is concerned with the case of existing agricultural credit societies formed on the Raiffeisen principle. There are at present in Ireland about 260 of these societies, most

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CREDIT.

of which have been organised by the Irish Agricultural Organisation Society. In the year 1901 the Department, with the concurrence of the Agricultural Board, decided to assist societies of this kind by granting loans in suitable cases. At present there are about one hundred credit societies holding loans from the Department, and the amount of the outstanding loans is about £9,000. Experience has shown that while many of the societies are doing excellent work, in some cases the money advanced by the Department is not being used to the best advantage, and it is evident that the societies would derive much benefit from a regular system of inspection and audit. The Department, believing that co-operative credit societies when established on a proper basis and when subject to adequate supervision and control can fulfil a most useful function in connection with the work of agricultural development, desire to see an improvement in the present methods of organisation and management.

The other aspect of the problem of credit has reference to the new tenancies which are being created under the recent Land Acts, especially in the West. Large areas of grazing land are being purchased by the State and are being subdivided into suitable farms which are being allotted to men brought from uneconomic holdings. As a rule the new-comers have little, if any, capital and are sadly deficient in farming knowledge. The Department have provided teachers and overseers whose business it is to help the new occupiers and to give them instruction and advice necessary to work their farms with some success. But no general system has yet been devised whereby these men can obtain sufficient capital on favourable terms to enable them to stock and equip their farms. The case of these men is not met by the existing agricultural credit societies, as the amounts of the loans needed are on a larger scale than the transactions of such societies. The Department feel that the problem, which is one of great complexity, should be dealt with in the first instance by means of a systematic and comprehensive inquiry; and they have under consideration the question of entrusting such an inquiry to a small departmental committee.

Under the Development and Road Improvement Funds Act, 1909, the Treasury are empowered, on the recommendation of the Development Commissioners appointed under the Act, to make advances out of the Development Fund established by the Act either by way of grant or by way of loan for any of the following

purposes:—

- (a) Aiding and developing agriculture and rural industries by promoting scientific research, instruction and experiments in the science, methods and practices of agriculture (including the provision of farm-institutes), the organisation of co-operation, instruction in marketing produce, and the extension of the provision of small holdings; and by the adoption of any other means which appear calculated to develop agriculture and rural industries;
- (b) Forestry, (including (1) the conducting of inquiries, experiments and research for the purpose of promoting forestry and the teaching of methods of afforestation; (2) the purchase and planting of land found after inquiry to be suitable for afforestation);

- (c) The reclamation and drainage of land;
  - (d) The general improvement of rural transport (including the making of light railways but not including the construction or improvement of roads);
  - (e) The construction and improvement of harbours;
  - (f) The construction and improvement of inland navigations;
  - (g) The development and improvement of fisheries;
- and for any other purpose calculated to promote the economic development of the United Kingdom.

The Department in July, 1910, submitted to the Development Commissioners, through the Treasury, an application for advances for (1) Forestry, (2) Fisheries, (3) Scientific Research for the purposes of agriculture, and (4) Horsebreeding. In support of this application evidence was given before the Commissioners by the chief officers of the Department and also by the Most Reverend Dr. Kelly, Bishop of Ross, member of the Agricultural Board. The schemes submitted by the Department are under the consideration of the Commissioners.\*

The Department have viewed with grave concern the continued decline of the flax-growing industry in Ireland. As much difference of opinion exists as to the cause of the decline the Department decided to appoint a Departmental Committee to make a searching investigation into the whole question. The Committee, which was appointed in December, 1909, consists of the following members:—

JOHN RITCH CAMPBELL, Esq., B.Sc., Assistant Secretary in respect of Agriculture of the Department of Agriculture and Technical Instruction for Ireland (Chairman).

HAROLD A. M. BARBOUR, Esq., M.A. (Messrs. William Barbour and Sons, Limited, Flax Spinners, Limerick);

JAMES G. CRAWFORD, Esq. (York Street Flax Spinning Company, Limited, Belfast);

JOHN W. SEWART, Esq. (Flax Grower and Scotch Mill Owner, Boghall, Coleraine);

JAMES SEWART, Esq., J.P. (Flax Grower, Liskey, Strabane);

DANIEL HENRY LANE, Esq., J.P. (Member of the Board of Conservators of Fisheries for the Cork District);

JAMES SCOTT GORDON, Esq., B.Sc. (Chief Agricultural Inspector of the Department of Agriculture and Technical Instruction for Ireland);

JOSEPH H. HINCHCLIFFE, Esq., M.D. (Agricultural Inspector of the Department of Agriculture and Technical Instruction for Ireland).

The terms of reference to the Committee are:—

"To inquire into the present state of the flax-growing industry in Ireland and the causes which are contributing to the decline of that industry, and to submit recommendations."

The Committee have concluded their sittings for the taking of evidence, and are now engaged in framing their Report.

\* Since this report was written the Lords Commissioners of His Majesty's Treasury, on the recommendation of the Development Commissioners, have sanctioned for one year a grant of £10,000 for Horse-breeding in Ireland.

The Consultative Committee nominated in accordance with Section 48 of the Irish Land Act, 1909, for the purpose of co-ordinating the work of the Department and of the Congested Districts Board as regards Sea Fisheries held their first meeting at the offices of the Department on 18th February, 1910.

The Committee at present consists of the following members:—

RIGHT HON. T. W. RUSSELL, P.C., MR. T. P. GILL, and MR. W. S. GREEN, C.B.,	} representing the Department,
MOST REV. DR. O'DONNELL, Bishop of Raphoe; RIGHT HON. SIR DAVID HARREL, P.C., K.C.B.; and MR. W. L. MICKS,	} representing the Congested Districts Board.

The Committee made recommendations for co-ordinating the work of the Department and of the Congested Districts Board in regard to the construction of marine works in congested areas, the maintenance of a joint engineering staff, marine police services and other matters. The recommendations made by the Committee were accepted by the Department and by the Congested Districts Board.

The Department have to record with pleasure that a valuable scheme of co-ordination between the Queen's University, Belfast, and the Belfast Municipal Technical Institute has with their approval been agreed to by the Senate of the Queen's University and the Corporation of Belfast, acting through their Technical Instruction Committee. Under this scheme the Senate have recognised the Municipal Technical Institute as a College in

which students of the University may pursue a course of study qualifying for a degree or a diploma of the University, or a part of such course, in certain approved subjects. These subjects are: Mechanical Engineering, Electrical Engineering, Chemical Technology, Textile Technology, Architecture and Naval Architecture. Other subjects may, by agreement between the Senate and the Belfast Technical Instruction Committee, subsequently be added, if that be found desirable. The classes at the Technical Institute to be attended by University students will be held in the day time. Students who desire that their attendance at the courses at the Institute should count towards graduation in the University are required to have matriculated at the University before entering on attendance at the courses. As to the distribution of time between the University and the Technical Institute (taking the Mechanical Engineering Course as an example) it is intended that students shall spend almost the whole

of the first year at the University. They will attend at the Technical Institute for about one-third of the second year, one-half of the third year, and almost the entire fourth year. Having passed the necessary examinations and complied with the prescribed conditions they will then be eligible for the degree of Bachelor of Science. It is proposed that similar arrangements should obtain as regards qualification for a diploma of the University, the standard for which will, of course, be lower than for a degree. The day courses at the Technical Institute will also be open to non-University students. The teaching staff, laboratories, and equipment of the Institute will be fully available for the co-ordinated courses and will be adequate for all immediate requirements.

In order to facilitate co-operation between the Senate and the Technical Instruction Committee a special Advisory Committee representative of both bodies, to be called the Committee of Technology, will be appointed. Any matters affecting the mutual interests of the University and the Technical Institute may be referred to this Committee for consideration and report. It has, happily, been found practicable to complete this arrangement for co-ordination without impairing in any degree the complete control of the Senate and of the Technical Instruction Committee over the respective institutions under their charge. The agreement for co-ordination has, in the first instance, been made for a period of seven years.

Reference has already been made to the steps that have been taken towards co-ordination between, the Queen's University, Belfast, and the Royal College of Science in Dublin (see page 12).

The Department have continued to act as a bureau of information with regard to the mineral and raw material resources of the country and to make inquiries and give advice through the agency of their Economic Geologist on many matters relating to these resources. A large number of inquiries regarding the occurrence and utilisation of raw materials have been dealt with. At the request of persons interested in the burning of lime, deposits of limestone have been reported upon. The Department have supplied the services of an expert lime burner for a limited period to give instruction in the burning of lime. Some kilns have been re-started as a result of this procedure. The development of the mineral resources of the country by private enterprise is steadily increasing.

The scheme for aiding Village Libraries continues in operation, and small grants of books (limited to £3 in value), dealing with subjects of agricultural and technical instruction, have been made to approved libraries in districts where the Department have had reason to believe that the libraries would prove useful in connection with their schemes of agriculture and technical instruction.



## PART II.—DETAILS OF THE DEPARTMENT'S OPERATIONS, 1909-10.

### I.—AGRICULTURE.

The period covered by this section of the Report is the agricultural year ended 30th September, 1910.

The Department's contributions in aid of expenditure under approved agricultural schemes administered by county committees were made at the same rates as in previous years. In view, however, of the increasing demands on their funds, resulting from the extension of county schemes, the Department considered it desirable this year to revise the principle on which these contributions were based. It was, accordingly, decided, with the concurrence of the Agricultural Board, that the amount of the Department's grants towards the cost of agricultural schemes should in future bear some proportion to the conditions of each county, taking into consideration valuation, population, number of breeding stock, and area under crops. This new method of distribution will take effect with regard to all agricultural schemes which may come into operation after 30th September, 1910, and will remain in force for a period of five years from that date.

#### (a.) AGRICULTURAL INSTRUCTION.

At the close of the year 1909-10 the Department's programme of agricultural education had been ten years in operation. The first Annual Report set forth at length the policy which had been agreed on as the most suitable for the opening years of the Department's work having regard to the stage of educational development which the country had then attained. The principal features of the procedure adopted were:—

(1.) The inauguration of a system of itinerant instruction calculated to bring the farming classes into touch with the latest advances in their industry, and, at the same time, to prepare the way for permanent institutions for agricultural education.

(2.) The provision of facilities for training young farmers to become itinerant instructors, and for supplying qualified teachers for agricultural schools when the time for their foundation would arrive.

(3.) The re-organization and development of the educational institutions—the Royal College of Science, the Albert Agricultural College and the Munster Institute—in existence at the establishment of the Department and transferred to their control.

(4.) The postponement of the establishment of agricultural colleges and schools until the farming classes generally should be sensible of the need for more detailed and extended instruction than could be given by itinerant lecturers.

At the outset schemes of itinerant instruction in agriculture, horticulture, poultry-keeping and butter-making were proposed

by the Department for adoption by county committees of agriculture. These schemes were put into operation by the majority of the committees as soon as qualified persons were available to take up the instructorships. The schemes have remained substantially the same throughout the decade, but they have been revised each year and their scope extended in directions pointed out by the experience gained at the work. The number of instructors has increased steadily from year to year. At the close of the year under review each county committee of agriculture, with one exception, had several schemes in operation. In the great majority of counties all four schemes were working, and in several counties a second and even a third instructor was employed under one or more schemes. The number of instructors at work was as follows:—

Instructors in Agriculture,	...	...	36
" " Horticulture and Bee-Keeping,	...	...	36
" " Poultry-Keeping,	...	...	33
" " Butter-Making,	...	...	33
			<hr/>
Total,	...	...	138

The total shows an increase of ten as compared with the previous year.

Besides the instructors employed by county committees of agriculture under the schemes mentioned, there are several agricultural overseers and assistant overseers employed directly by the Department to carry out the special schemes of agricultural development in the poorer districts of the west. The Department were enabled during 1909-10—owing to the additional funds for agricultural work in congested districts provided by the Irish Land Act, 1909—to increase by thirteen the number of assistant agricultural overseers. Forty-three overseers and assistant overseers are now at work in these districts.

The figures given on pages 35 to 43 under the head of each of the schemes of itinerant instruction show how the services of the instructors are utilised by the farming community, and indicate the extent of their influence on the agricultural life of the country.

Although the re-organization of the agricultural institutions taken over by the Department in the year 1900 was at once proceeded with and provision made for training instructors and teachers, it has not yet been found possible for these institutions to meet fully the demand for qualified persons to take up the work of the various schemes. In the year, 1909-10, fifteen students completed their courses at the Royal College of Science, the Albert College, and the Munster Institute. All are now employed in connection with the Department's agricultural work, but several county committees had again to be disappointed in their expectation of obtaining instructors trained by the Department. The number of persons so trained who are employed by county committees or by the Department now amounts to one hundred and thirty-three.

While the operation of the schemes of itinerant instruction was being extended, advantage was taken of such opportunities as

arose for providing more intensive forms of instruction by means of permanent institutions. Prior to 1909-10, three new agricultural stations for the training of farm apprentices and one residential agricultural school for boys had been established. The attendance of students at these institutions during 1909-10, as well as at the Albert Agricultural College and at the Agricultural Faculty of the Royal College of Science, showed a satisfactory increase as compared with the preceding year. During the year under review negotiations were concluded for the purchase by the Department of land and buildings in county Antrim for the purposes of a residential agricultural school for boys from that county and from county Down. Twenty-five places will be provided at this school, which is expected to be ready for opening in 1911.

At the close of 1909-10 there were in operation eleven agricultural schools for girls as compared with one at the beginning of the decade. No new school was opened during the year, but the residential accommodation at the Munster Institute and at five other schools was increased, and alterations undertaken in the buildings of the Ulster Dairy School in order to provide additional places there.

Intermediate between itinerant instruction and agricultural schools come the agricultural classes which are held during the four winter months and provide from thirty to forty days' instruction. The winter of 1909-10 was marked by a further large increase in the number of these classes, which are highly valued in almost all the districts where they are held, and are attended by farmers of all ages from fifty-one down to fifteen or sixteen. The tutorial poultry classes, which stand in the same relation to the work of the itinerant instructor in poultry-keeping as do the winter agricultural classes to the work of the instructor in agriculture, were also adopted by a largely increased number of county committees.

The training of teachers for employment under the Department's programme of agricultural education is the main function of the agricultural faculty of the Royal College of Science. The course extends over three years. A number of valuable scholarships are offered annually by the Department in connection with this course. Almost all the students in the agricultural faculty are holders of scholarships.

Eight students who completed their training in June, 1909, and obtained the college diploma in agriculture received appointments during the year 1909-10 in connection with the Department's schemes of agricultural education. The total number of students who have entered the agricultural faculty as holders of scholarships provided by the Department and completed the course, was, at the end of the 1909-10 session, sixty-four, of whom thirty-one are employed as itinerant instructors in agriculture, three as teachers of agricultural classes, eight at the Department's colleges and stations, and eleven on the central staff of the Department.

An examination for the award of scholarships in agriculture, horticulture, forestry and creamery management, tenable at the college, was held in August, 1909, in accordance with the terms of the prospectus printed in the Appendices, page 183. Fifty-three candidates sat for the examination, and as a result eleven new scholarships in agriculture and one in horticulture were awarded. In addition, a student who obtained a scholarship in 1908 and resigned it in January, 1909, owing to ill-health, was re-admitted as a first year student under a special arrangement as to fees for the first six months. None of the candidates in forestry or creamery management reached the qualifying standard. Seventeen scholarships awarded in previous years—15 in agriculture, 1 in horticulture, and 1 in forestry—were renewed in full for the 1909-10 session.

The total number of students in the agricultural faculty at the close of the session in June, 1910, was:—

First year,	...	14
Second year,	...	10
Third year,	...	8
		<hr/> 82

Six of the third year students passed their final examinations and were awarded the college diploma in agriculture.

The 1909-10 session at the Albert Agricultural College was conducted on similar lines to the 1908-9 session.

ALBERT AGRICULTURAL COLLEGE. The fee for the college course was, for farmers' sons, £15, and for other students, £50. The entrance examination and the supplemental entrance examination, which were held in September and October, 1909, respectively, were attended by a total of sixty candidates. Of these thirty-five qualified for admission to the course. Both the number of candidates and the number of students admitted show a substantial increase as compared with the previous session. The programme of the entrance examination is given in the Appendices, page 185.

Five students of the college obtained scholarships in agriculture, tenable at the Royal College of Science, at the examination held in August, 1910.

The entrance examination for the horticultural school was held on the 27th August, 1909, and six candidates qualified for admission. The prospectus is printed in the Appendices, page 186. One student completed the course of training in September, 1910, and qualified for employment in connection with the Department's horticultural work. Twenty-eight men trained in the school are now so employed. From January, 1910, the students of this school were provided with furnished lodgings in a suitable building on the farm instead of having, as in previous years, to find lodging in the village of Glasnevin. As a result of the new arrangement a revised scale of maintenance allowances to the students was adopted.

As almost all the persons employed as instructors under the Department's scheme of instruction in horticulture and bee-keeping for 1909-10 were qualified to teach the latter subject, it was not found necessary during the past year to hold at the college a special course in bee-keeping as was done in previous years. Provision was, however, made by which the Department's expert in bee-keeping visited several counties and gave practical individual tuition to the local instructors.

The number of students at the college during the year was as follows:—

Agricultural Course, ... ..	35
Horticultural Course, ... ..	7
Royal College of Science Students, ... ..	16
Total, ... ..	58

The agricultural courses at the Clonakilty and at the Athéary agricultural stations during the session 1909-10 were of a similar nature to those given in 1908-9. In the case of Ballyhaise agricultural station, the session was divided into two periods, the winter term and the summer term. The winter term ended on the 23rd March, 1910, and the summer term commenced on the 6th April, 1910. The greater part of the winter term was given to class-room work. The summer term, which was almost wholly devoted to practical training in the fields and in the farmyard, was very suitable for boys who had attended classes organised by county committees of agriculture under the Department's scheme of winter agricultural classes. Students who have attended satisfactorily at such classes are exempted from the entrance examination to which other applicants for admission to agricultural stations are submitted. In all twenty-one students entered for the agricultural courses at Ballyhaise station, of whom two attended during the winter term only and five during the summer term only.

Eighteen students joined the course of instruction in creamery management which was conducted at Ballyhaise agricultural station from October, 1909, to March, 1910. All these students attended the examination in technical subjects as applied to creamery management held in March, 1910. Nine obtained a certificate of having passed in all the subjects, and one of having passed in two subjects of this examination. The prospectus of the course will be found in the Appendices, page 190.

One student was admitted as an apprentice in cheesemaking during the season—May to October, 1910, at Ballyhaise agricultural station. Brief details of the results of the cheesemaking experiments at this station are given at page 70 of this Report.

The system of granting bonuses not exceeding £10 to apprentices at Athéary agricultural station on the termination of their period of apprenticeship was continued during the 1909-10 session. The amount of the bonus allowed in each case depended on the conduct of the apprentice and his attention to work throughout the session.

The total number of students, including paid apprentices, at the three stations was as follows:—

Athenry,	...	...	12
Ballyhaise,	...	...	39
Clonskilty,	...	...	30
Total,	...	...	81

The total attendance in the previous year was 75.

Fees proportionate to the valuation of the holdings of their parents were paid by agricultural students at Ballyhaise and Clonskilty stations. Students who were not sons of farmers paid a fee of £20. No fee was charged at Athenry station. Students who entered for the summer term only at Ballyhaise station paid half the fee charged for the whole session. The fee for the cheese-making course at Ballyhaise was £5, and for the creamery management course, £10.

The percentage of agricultural students of each class at the three stations during the 1908-9 and 1909-10 sessions was as follows:—

Valuation of Parents' Holdings.	Percentage of total Agricultural Students	
	1908-9.	1909-10.
Under £20, . . . .	31	31
Between £20 and £40, . .	19	26
„ £40 and £60, . .	22	17
Over £100, . . . .	9	20
Not sons of farmers, . . .	19	6
	100	100

The scheme of winter agricultural classes for 1909-10 was adopted by county committees of agriculture in twenty-six counties. Seventy classes were formed under the scheme, and eleven hundred and sixty-six students were admitted. The scheme was continued in all counties in which it had been in operation during the year 1908-9, with the exception of Kildare, and was adopted for the first time in the following counties:—Galway, Leitrim, Limerick, Louth, Mayo, Queen's, and Roscommon. As compared with the previous year, there was an increase of twenty classes, and of almost three hundred students.

Several alterations were made in the scheme, as compared with its form in previous years. The more important of these alterations were, briefly:—

- I.—The duration of the course was reduced from twenty to sixteen weeks.
- II.—The minimum daily duration of the class was reduced from five to four hours.
- III.—Subject to the Department's approval, county committees of agriculture were empowered to admit to the classes students of between fifteen and sixteen years of age if a sufficient number of students over the latter age was not forthcoming. It may be mentioned that very few applicants for admission were under sixteen years of age.
- IV.—Students resident within a radius of four statute miles of their class centre were not to be eligible for the award of travelling allowances. Three miles had been the distance in preceding years.

Thirty-one teachers of agricultural subjects were employed, seven of these having been specially engaged for the work. The remaining twenty-four teachers were county itinerant instructors in agriculture.

The following table indicates the extent to which agricultural classes have been availed of in each year since their inception:—

Year.	Number of Classes.	Number of Students.
1902-3, . . . . .	2	44
1903-4, . . . . .	7	161
1904-5, . . . . .	18	317
1905-6, . . . . .	25	422
1906-7, . . . . .	28	449
1907-8, . . . . .	33	529
1908-9, . . . . .	50	875
1909-10, . . . . .	70	1,166

Particulars regarding the several classes in operation in the winter of 1909-10 are given in the following table:—

COUNTY.	Class Centres.	Duration of Course in Weeks.	Number of Days each on which Class met.	Number of Students admitted.	Subjects other than Agriculture in which Instruction was given.
Antrim, . .	Larne, . . . .	17	12	23	Horticulture and Poultry-keeping.
Armagh, . .	Bellinzieberry (Upper),	17	12	19	do.
	Whitecross, . . .	16	12	14	Horticulture and Veterinary Hygiene.
Callow, . . .	Newtownhamilton (advanced class),	16	2	15	do.
	Borris, . . . .	16	2	11	Horticulture.
Clare, . . . .	Clonagall, . . . .	15	12	18	do.
	Milbown Malbay, .	19	12	31	Veterinary Hygiene and Horticulture.
Cork, . . . .	Newmarket-on-Fergus,	19	2	14	do.
	Killaloe, . . . .	20	12	29	do.
	Ovens, . . . .	15	2	20	Horticulture.
	Canna, . . . .	15	12	24	do.
	Liscarrow, . . . .	14	2	24	do.
	Knocknagroe, . . .	15	12	20	do.
	Bollinshesig, . . .	15	12	19	do.
	Kilnamartyre, . . .	15	12	29	do.
	Firmount, . . . .	15	12	28	do.
	Kilmurry (South), .	14	2	14	do.
Down, . . . .	Gortree, . . . .	14	2	15	do.
	Lurgeld, . . . .	15	2	17	do.
	Santfield, . . . .	16	2	18	Veterinary Hygiene and Horticulture.
	Mayobridge, . . . .	16	2	13	Horticulture.
Fermanagh, . .	(a) Brookborough, .	10	2	11	Horticulture.
	(a) Springfield, . .	9	2	14	do.
Galway, . . .	Athenry, . . . .	18	2	15	do.
	Tuam, . . . .	16	2	12	do.
Kilkenny, . . .	Kilkenny, . . . .	16	2	34	Veterinary Hygiene and Horticulture.
	Mooneau, . . . .	16	2	27	do.
	Kilnacow, . . . .	16	2	21	do.
	Paulstown, . . . .	16	2	28	do.
	Glenmore, . . . .	16	2	20	do.
King's, . . . .	(b) Balan, . . . .	4	2	7	Horticulture.
	Kilkenfort, . . . .	17	2	12	do.
Leitrim, . . .	Carrick-on-Shannon,	16	2	11	—
Limerick, . . .	Drumshanbo, . . .	17	2	29	—
	Ballingary, . . . .	16	2	9	—
	Athoe, . . . .	15	2	8	—
	Kilmallock, . . . .	16	2	5	—

(a) Classes discontinued from 17th and 18th January, respectively owing to illness of teacher.

(b) Class discontinued from 4th December, owing to poor attendance.



COUNTY.	Class Centres.	Duration of Course in Weeks.	Number of Days, Monday on which Class met.	Number of Students admitted.	Subjects other than Agriculture in which instruction was given.
Londonderry.	he Cross.	16	2	11	Horticulture.
	Lima vady.	16	2	10	do.
Longford.	Ardagh.	15	2	11	do.
	Newtownswel.	16	2	17	do.
Louth.	Dunleer.	16	2	15	do.
	Dundalk.	16	2	13	do.
Mayo.	Westport.	16	2	18	—
		(subsequently 3)			
	(c) Ballina.	20	2	16	—
	Claremorris.	16	2	21	—
		(subsequently 3)			
Meath.	Garlandsf.	16	2	19	Horticulture
	Woodpole.	14	2	12	do.
	Kildalkey.	16	2	17	do.
	(d) Ardenth.	9	2	15	do.
	Kilmeasoo.	16	2	11	do.
Queen's	Vicarsstown.	16	2	14	—
	Clonsilla.	16	2	18	—
Rosecommon.	Cranagh.	15	2	6	Horticulture
Sligo.	Garraun.	16	2	23	do.
	Ballyrush.	16	2	18	do.
		14	2	19	do.
Tipperary, N.R.	Neenagh.	13	2	23	do.
	Templemore.	16	2	13	do.
Tipperary, S.R.	Castel.	16	2	20	do.
	Tipperary.	18	2	11	Veterinary Hygiene and Horticulture.
Tyrone.	Doona.	18	2	12	do.
	Fintona.	17	2	12	do.
	Newtownstewart.	15	2	10	Horticulture
Waterford.	Lismore.	6	2	5	do.
	(e) Dungarvan.	11	2	11	do.
Westmeath.	(f) Moate.	6	2	6	do.
	(g) Killeghen.	17	2	16	do.
Wexford.	Castlebridge.	16	2	17	do.
	Gorey.	16	2	24	do.
	Taghmon.	16	2		
Total.	70 classes.			1166	

(c) Class discontinued from 24th January, owing to poor attendance.

(d) Class discontinued from 29th January, owing to poor attendance.

(e) Class discontinued from 24th December, owing to poor attendance.

(f) Class discontinued from 31st January, owing to poor attendance.

(g) Class discontinued from 24th December, owing to poor attendance.

In addition to the foregoing, an agricultural class, on somewhat similar lines to those held under the winter classes scheme, was established in county Kerry, at Newtownsandes, near Listowel, and a course of eight weeks was given by the itinerant instructor in agriculture.

In connection with the scheme of winter agricultural classes, the county Wexford committee of agriculture offered, with the approval of the Department, three scholarships, of the value of £20 each, tenable at Clonakilty agricultural station. The scholarships were awarded on the results of an examination confined to students who had attended an agricultural class in county Wexford during the winter of 1909-10 or previously. The cost of the scholarships was defrayed from the joint fund for agricultural schemes in the county.

The committee of agriculture for county Kilkenny gave, on similar terms, one scholarship, of the value of £50, tenable at the Albert Agricultural College.

A course extending from the beginning of September to the end of June was conducted by the Franciscan Brothers at the Mountbellew college. Agricultural and horticultural subjects were dealt with, and practical training in farmwork on the college farm formed a principal part of the instruction. A special grant of £150 was made by the Department to the college authorities for the provision of modern farm machinery and implements. The farm and classrooms are now very fully supplied with teaching equipment. Twenty resident students were in attendance during the course. The prospectus will be found in the Appendices, page 192.

The Department have acquired at Greenmount, near Muckamore, county Antrim, a large house and 260 acres of land suitable for the purposes of an agricultural school. The premises will be leased to the Antrim county council, and as soon as the requisite structural alterations in the house have been completed, a school with residential accommodation for about 25 students will be opened under the control of the county committee of agriculture. The capital expenses of the undertaking are being defrayed by the Department, and the cost of maintaining the school will be borne by the joint fund for agricultural schemes in county Antrim. Six places will be reserved for students from county Down, in respect of whom the county Down committee of agriculture will make a contribution towards the upkeep of the school.

Difficulties having arisen in connection with the proposal to establish a residential school or agricultural institute to serve the needs of counties Donegal, Londonderry and Tyrone jointly, it was decided to make a beginning by providing a non-residential agricultural institute for county Tyrone only, on the understanding that the other two

CO. TYRONE  
AGRICULTURAL  
INSTITUTE.

to serve the needs of counties Donegal, Londonderry and Tyrone jointly, it was decided to make a beginning by providing a non-residential agricultural institute for

counties might participate later on if the institute was found to work satisfactorily. Strabane was selected as a suitable centre for the new institution, but it has not yet been possible to secure a suitable site in the neighbourhood of that town.

The teaching of the Department's programme of agricultural education for girls was continued at the Munster Institute, Cork, the Ulster Dairy School, Cookstown, and at nine schools of rural domestic economy. The demand for admission to residential places at these schools continues to increase steadily.

During the year provision was made for the reception of thirty-one additional resident pupils at the following schools:—

Munster Institute	...	...	6 extra places.
Westport School of R.D.E.	...	...	5 " "
Claremorris	"	...	5 " "
Swinford	"	...	5 " "
Clifden	"	...	5 " "
Perthanna	"	...	5 " "

Arrangements are also being made for the provision during the coming year of twenty additional places for pupils at the Ulster Dairy School.

Four sessions were held at the Institute during the year, and were attended by 204 pupils (including pupils admitted to second, third, or fourth sessions).

At the end of the year there were 213 applicants awaiting their turn for admission. Six extra places for resident pupils were provided during the year, so that fifty-six pupils will in future be admitted to each session.

The courses for the training of teachers for agricultural schools for girls and of county instructors in poultry-keeping and butter-making were continued during the year. Ten students passed their final examinations, including two instructors who attended supplementary courses in butter-making and in poultry-keeping respectively. Eight students of the Institute obtained employment in connection with the Department's work. The number of past students so employed now amounts to fifty-two.

Four sessions were held at this school during the year, at which 120 students attended. During the year 116 applications were received, of which a large proportion were from counties outside the province of Ulster. The school is conducted on the same lines as the Munster Institute, with the exception that, for the present, finishing courses for instructors and teachers-in-training are held at Cork only. Students of the Ulster Dairy School who qualify for these courses are transferred to the Munster Institute.

Structural alterations and additions are being made to provide accommodation for twenty more pupils.

Prospectuses of the Munster Institute, and of the Ulster Dairy School, will be found in the Appendices, pages 194-5.

These schools, nine in number, are under private management and are aided by grants from the Department towards expenses of management, salaries of teachers, maintenance of resident pupils, and cost of teaching equipment.

The instruction given at the several schools is intended for girls of the farming class who attend as day or resident pupils. The programme, as a rule, includes instruction in each of the following subjects:—

Dairying.  
Poultry-keeping.  
Cottage gardening.  
Household management.  
Cookery.  
Sewing.  
Laundry work.

There is an increasing demand for admission to residence at the schools, but the attendance, as day-pupils, of girls living in the locality of the schools is not in every case so satisfactory.

Pupils of rural domestic economy schools who prove likely to qualify for teacherships or instructorships are admitted to the Munster Institute with a view to completing their training.

The following table shows the number of day and of resident pupils respectively admitted to these schools during the year 1909-10, and the totals for previous years:—

School.	Day pupils.	Resident pupils.	Total.
Westport, Co. Mayo, . . . . .	102	30	138
Claremorris, Co. Mayo, . . . . .	38	25	63
Swinford, Co. Mayo, . . . . .	53	15	68
Portlanna, Co. Galway, . . . . .	58	30	88
Chifden, Co. Galway, . . . . .	21	23	44
Killeshandra, Co. Cavan, . . . . .	27	12	39
Remembrance, Co. Wexford, . . . . .	—	72	72
Loughglynn, Co. Roscommon, . . . . .	69	—	69
Berada, Co. Sligo, . . . . .	70	—	70
Total, year 1909-10 (9 schools) . . . . .	438	215	653
Total, year 1908-9 (9 schools), . . . . .	474	185	659
Year 1907-8 (8 schools), . . . . .	395	161	556
Year 1906-7 (5 schools), . . . . .	248	135	383
Year 1905-6 (3 schools), . . . . .	228	40	268

The Department's scheme of instruction in agriculture (printed in the Appendices, page 227), was again put into operation by each county committee in 1909-10. Thirty-six instructors were employed, there being no increase in the number at work during the previous year. The county committees of Cork, Tyrone and Wexford each employed two instructors.

The number of instructors employed each year under this scheme, since the establishment of the Department, may be observed from the following table:—

Year.	No. of Instructors at work.		
1900-1,	...	...	3
1901-2,	...	...	10
1902-3,	...	...	10
1903-4,	...	...	17
1904-5,	...	...	21
1905-6,	...	...	23
1906-7,	...	...	30
1907-8,	...	...	34
1908-9,	...	...	36
1909-10,	...	...	36

During the season, from October to March, 826 lectures were delivered at 390 centres, at which close on 41,000 persons attended, giving an average of about 50 for each lecture. These figures show a considerable decrease when compared with those for the years 1907-8 and 1908-9, owing to the fact that twenty-four of the instructors were employed in teaching winter agricultural classes as compared with ten in 1907-8 and nineteen in 1908-9. The instructors paid 13,581 visits to farms, an average of 377 visits for each instructor. Upwards of 671 field experiments and 2,036 demonstrations were conducted by the instructors, particulars of which will be found under the heading of "Field Experiments" at page 62 of this Report. These experiments and demonstrations are distinct from the demonstrations conducted in congested districts by the Department's overseers, which are dealt with on page 36.

Every instructor, except two, was engaged for some weeks during the summer in judging under the Department's scheme of prizes for cottages and small farms, in a county other than that in which he was employed as instructor. The instructors also assisted in work under the Department's dairy cattle registration scheme, and in performing certain duties in connection with the Fertilizers and Feeding Stuffs Act. A conference of the instructors was held in the Department's offices on the 27th and 28th June, during which many important points in connection with their work were discussed and suggestions for future procedure considered.

The Irish Land Act, 1909, extended the area scheduled as congested to include the whole of the counties Donegal, Sligo, Leitrim, Roscommon, Mayo, Galway and Kerry, six rural districts in county Clare and four rural districts in the western portion of county Cork. The Act also provided for the payment to the Department of a sum of £19,000 per annum for the purposes of agricultural development in the districts scheduled as congested.

Thirteen additional assistant agricultural overseers were appointed at the beginning of 1910 and assigned for duty in connection with the Department's special schemes of agricultural instruction mainly in the new congested districts, making a total of five agricultural overseers and thirty-eight assistant overseers at work during the year. These officers are located as follows:—

Co. Donegal.—One overseer and five assistants.

Counties Mayo, Sligo and Roscommon.—One overseer and thirteen assistants.

Co. Leitrim.—One overseer and two assistants.

Counties Galway, Clare and Roscommon (Castlereagh District).—One overseer and eleven assistants.

Counties Kerry and West Cork.—One overseer and seven assistants.

Fourteen extra assistants were in addition employed temporarily during the spraying season to give instruction and demonstrations in the spraying of potatoes.

Special demonstration plots were established as follows on the lines adopted in previous years:—

SPECIAL  
DEMONSTRATION  
PLOTS IN CONGESTED  
DISTRICTS.

Description of plot.	Quantity of seed, &c., supplied for each plot.	No. of plots.
Potato, . . . . .	1 cwt.	1,873
Oats, . . . . .	"	1,391
Barley, . . . . .	"	55
Wheat, . . . . .	"	82
Rye, . . . . .	"	14
Turnips and Mangels, . . . . .	1 lb.	1,687
Grass, . . . . .	12 lbs.	1,115
Artificial Manures, . . . . .	1 cwt.	2,084
Lime, . . . . .	10 cwt.	118
Basic Slag, . . . . .	2 cwt.—2½ cwt.	376
Potato Sprouting, . . . . .	6-12 boxes	806
Garden Vegetables, . . . . .	7 varieties of vegetables.	579
Total, . . . . .		9,579

The plots were located as follows:—

Donegal, ... ..	1,748
Mayo, ... ..	2,298
Sligo, ... ..	99
Roscommon, ... ..	412
Leitrim, ... ..	861
Galway, ... ..	1,529
Clare, ... ..	341
Kerry, ... ..	1,414
West Cork, ... ..	888

All seeds, etc., required for these plots were supplied by the Department at prices representing approximately half the gross cost.

The number of plots established in each year since the inception of these schemes is as follows:—

1907, ... ..	8,834
1908, ... ..	8,288
1909, ... ..	8,843
1910, ... ..	9,579

As in previous years, the agricultural overseers were largely occupied during the summer in encouraging occupiers to spray their potato crops. The Department continued the arrangement for the supply for cash of hand-spraying machines to occupiers of small holdings in districts where such articles are not readily procurable through local agencies at reasonable prices. The overseers again undertook the repair of spraying machines that were out of order, the necessary repair parts being supplied by the Department at cost price.

The following table shows the number of spraying machines sold and repaired by the overseers and their assistants during 1910:—

District.	Machines Sold.	Machines Repaired.
Co. Donegal, ...	248	500
" Mayo, ...	503	290
" Sligo, ...	273	160
" Roscommon, ...	127	86
" Leitrim, ...	280	135
" Galway, ...	359	260
" Clare, ...	126	90
" Kerry, ...	181	110
" West Cork, ...	65	50
Total,	2,112	1,701

The operations in this connection during the past four seasons were as follows:—

Season.	Machines Sold.	Quantities of spraying materials sold.		Machines repaired.
		Sulphate of Copper.	Washing Soda.	
1907, . . .	1,259	T. C. Q.	T. C. Q.	1,382
1908, . . .	1,364	61 11 1	27 1 0	1,901
1909, . . .	1,211	75 6 2	36 13 1	996
1910, . . .	2,112	1 17 1	1 7 3	1,761
		—	—	
Total, . . .	5,946	153 15 0	65 2 0	5,080

In 1910 the stocking of copper sulphate and washing soda by local traders was undertaken to such an extent that the necessity for the sale of these materials to small farmers by the Department was practically obviated.

Shortly before the close of the year under review a scheme for providing veterinary dispensaries in congested districts (printed in the Appendices, page 250), was put into operation in twelve localities where the services of a qualified veterinary surgeon were not previously available. It is proposed to extend this scheme to other parts of the congested districts during the coming year.

Particulars of the schemes for encouraging improvement in the poultry-keeping industry in 1909-10, which was in operation in every county save Dublin, will be found in the Appendices, page 232. Thirty-three instructors were employed, fourteen of whom were also engaged for portion of the year in connection with the scheme of instruction in butter-making.

The scheme of tutorial and practical classes was adopted by twenty-two county committees, viz.:—Armagh, Carlow, Cork, Donegal, Down, Galway, Kildare, Kilkenny, King's, Londonderry, Longford, Louth, Meath, Monaghan, Queen's, Roscommon, Tipperary N.R., Tipperary S.R., Waterford, Westmeath, Wexford and Wicklow. The instruction at these classes which covered a period of twelve months is essentially of a practical nature and includes discourses aided by demonstrations followed by practical and class work in which the pupils take part. Visits by the instructor to the poultry-runs of pupils and others in the district is also an important feature of the work. The nature of the instruction afforded at these classes and a list of the equipment required are set forth in detail in the scheme printed in the Appendices, page 238. During the period under review the instructors gave 568 lectures, at which there was an average



attendance of 56 pupils. In addition, 1,522 classes were held with an average attendance of 11, and 10,198 visits were made to poultry-keepers.

The premiums for holders of egg distribution stations were the same as in last year, viz.:—£5 for hens, or for hens and ducks, and £2 for Embden geese. In 1909-10, however, a station-holder was required to distribute at least 80 sittings of hen or of hen and duck eggs. The premium for a turkey station was again fixed at £2.

It is gratifying to note the great extension of the poultry-keeping industry in Ireland which has resulted from the operation of this scheme.

The following table shows the progress of the work under this scheme during the past ten years:—

Year.	Counties.	No. of Meetings held.	No. of Classes held.	No. of Egg-Distributing Stations.		Eggs Distributed.	No. of Turkey Stations.	No. of Geese Stations.
				Hens only.	Hens and Ducks.			
1900-1.	4	223	—	—	—	—	—	—
1901-2.	12	1,134	—	36	—	4,198	—	—
1902-3.	22	2,231	—	220	—	18,040	—	—
1903-4.	32	3,185	—	346	46	40,257	161	—
1904-5.	30	2,662	—	333	129	49,191	328	—
1905-6.	30	2,024	629	315	180	52,400	404	—
1906-7.	30	1,367	892	303	205	51,378	460	63
1907-8.	30	895	1,474	303	233	53,919	467	92
1908-9.	31	677	1,492	328	261	63,471	497	130
1909-10.	32	698	1,522	337	282	66,187	532	140

In the past year the Department arranged for the keeping of egg records by the holders of twenty-five selected egg distribution stations. The Department supplied free of charge the trap nests and other requisites, and the station holders undertook to keep for a period of two years a continuous record of the number of eggs laid by each hen from a stipulated number of pure-bred birds.

The following table contains particulars of the amounts paid by each county committee for premiums under the poultry scheme, 1909-10:—

County.	Hen, and Duck Stations.	Goose Stations.	Turkey Stations.
	£ s. d.	£ s. d.	£ s. d.
Antrim, . . . . .	59 5 0	—	48 0 0
Armagh, . . . . .	60 0 0	—	40 0 0
Carlow, . . . . .	34 6 3	6 0 0	10 0 0
Cavan, . . . . .	83 15 7	18 0 0	50 0 0
Clare, . . . . .	45 0 0	—	16 0 0
Clon, . . . . .	285 0 0	18 3 4	71 6 0
Donegal, . . . . .	170 7 6	10 16 8	37 18 0
Down, . . . . .	125 13 9	—	42 0 0
Dublin, . . . . .		No Scheme.	
Formanagh, . . . . .	70 0 0	—	21 18 0
Galway, . . . . .	174 18 8	11 3 4	55 10 0
Kerry, . . . . .	*133 0 0	10 0 0	36 10 0
Kildare, . . . . .	63 17 6	4 0 0	16 0 0
Kilkenny, . . . . .	85 0 0	6 0 0	41 12 0
King's, . . . . .	53 1 3	4 0 0	20 0 0
Leitrim, . . . . .	60 0 0	4 0 0	29 0 0
Limerick, . . . . .	09 18 9	—	15 18 0
Londonderry, . . . . .	70 0 0	—	16 0 0
Longford, . . . . .	45 0 0	12 0 0	24 0 0
Louth, . . . . .	78 8 9	12 0 0	33 0 0
Mayo, . . . . .	247 13 9	17 10 0	39 12 0
Meath, . . . . .	100 0 0	10 0 0	49 14 0
Monaghan, . . . . .	75 0 0	10 0 0	40 0 0
Queen's, . . . . .	39 15 0	—	12 6 0
Roscommon, . . . . .	120 0 0	17 0 0	50 0 0
Sligo, . . . . .	70 0 0	6 0 0	12 0 0
Tipperary (N.R.), . . . . .	89 3 9	11 10 0	29 10 0
" (S.R.), . . . . .	79 7 6	20 0 0	25 8 0
Tyrone, . . . . .	75 0 0	16 0 0	50 0 0
Waterford, . . . . .	75 0 0	—	15 10 0
Westmeath, . . . . .	111 8 9	22 13 4	47 16 0
Wexford, . . . . .	96 17 6	10 0 0	40 0 0
Wicklow, . . . . .	70 0 0	8 0 0	12 0 0
Totals, 1910, . . . . .	3,028 19 3	273 16 8	1,048 14 0
" 1909, . . . . .	2,899 19 6	234 3 4	974 14 0
" 1908, . . . . .	2,615 17 11	169 18 4	903 18 0

\* Also three special stations at £5=£15.

The regulations of the scheme of instruction in horticulture and bee-keeping are printed in the Appendices, HORTICULTURE AND page 244.

SEE-KEEPING. With the exception of Dublin and Leitrim the scheme was adopted by every county in 1910. The Tipperary (S.R.) county committee, however, made provision for instruction in horticulture only.

Of the thirty-six instructors employed during the year twenty-nine were qualified to give instruction in horticulture and bee-keeping, four were qualified in horticulture only, and three in bee-keeping only. In three counties separate instructors were employed for horticulture and for bee-keeping respectively.

An instructor's duties under this scheme, although confined mainly to giving practical demonstrations in gardens, orchards, &c., in the planting, pruning, grafting, and spraying of trees, &c., include the delivery of lectures to a limited extent. During the year 330 such lectures were given at which there was an average attendance of 47, and the number of visits and demonstrations at gardens, orchards and selected plots amounted to 25,589.

The number of demonstration plots established in 1910 in connection with this scheme was 286 as compared with 270 in 1909—the plot-holders evincing a keen interest in the cultivation of their plots. The Department hope that in future all such plots will be established principally on labourers' holdings.

As in previous years the committees again made provision for assisting farmers and others in procuring reliable forest and other trees. The Department inspected the stocks of the principal Irish nurseries, and furnished the several county committees with particulars of the classes of trees approved at each nursery. The committees then usually invited tenders for the supply of trees to residents in the county. All trees were purchased subject to the approval of the instructors, and by this means the applicants were protected from having unsuitable trees supplied to them.

The following figures indicate the extent to which trees were distributed under the foregoing arrangement during the year ended 30th September, 1910:—

Apples, ... ..	29,731
Pears, ... ..	1,921
Plums, ... ..	1,706
Damsons, ... ..	294
Cherries, ... ..	86
Gooseberries ... ..	8,262
Currants, ... ..	5,848
Raspberries, ... ..	3,219
Other fruits, ... ..	2,344
Forest trees, ... ..	352,362
Other trees and shrubs, ... ..	72,339

Statements have been received in respect of 32 counties from which it would appear that 461 cases of the disease have during the year come under the notice of the local authorities in these counties and (IRELAND) ACT, 1908, have received attention.

With the sanction of the respective county councils provision was made by twenty-nine county committees of

agriculture as under for the payment of compensation for bees, &c., compulsorily destroyed under the provisions of the Act.

County.	Amount allocated for compensation.
<b>ULSTER:</b>	£
Antrim, ... ..	15
Armagh, ... ..	10
Cavan, ... ..	15
Donegal, ... ..	15
Down, ... ..	30
Fermanagh, ... ..	10
Londonderry, ... ..	—
Monaghan, ... ..	10
Tyrone, ... ..	10
<b>MUNSTER:</b>	
Clare, ... ..	10
Cork, ... ..	20
Kerry, ... ..	5
Limerick, ... ..	9
Tipperary, N.R., ... ..	10
Tipperary, S.R., ... ..	9
Waterford, ... ..	—
<b>LEINSTER:</b>	
Carlow, ... ..	—
Dublin, ... ..	—
Kildare, ... ..	10
Kilkenny, ... ..	10
King's, ... ..	5
Longford, ... ..	4
Louth, ... ..	10
Meath, ... ..	20
Queen's, ... ..	5
Westmeath, ... ..	10
Wexford, ... ..	52
Wicklow, ... ..	10
<b>CONNACHT:</b>	
Galway, ... ..	20
Leitrim, ... ..	5
Mayo, ... ..	10
Roscommon, ... ..	10
Sligo, ... ..	5
<b>Total, ...</b>	<b>£364</b>

Payments in respect of compensation, amounting to £92 17s 2d., were recommended by eleven of the twenty-nine local authorities who made provision for this purpose as shown above. In the remaining eighteen counties no payments were recommended.

The scheme of instruction in butter-making was continued during 1910. The committees of twenty-six counties adopted the scheme and employed thirty-three instructors. Of these instructors fourteen were also engaged during portion of the year giving instruction in poultry-keeping.

The committees of the counties Antrim, Armagh, Dublin, Fermanagh, Limerick, Sligo and Tyrone did not put the scheme into operation during the year 1910.

In addition to making 7,703 visits to private dairies the instructors gave 128 lectures, and conducted 4,093 dairy classes in 306 centres where courses (extending from two to four weeks) were held with an average attendance of eight.

The following statement shows the number of counties in which instructors have been employed each year since the inception of the scheme:—

1900-1,	...	...	...	1
1901-2,	...	...	...	4
1902-3,	...	...	...	11
1903-4,	...	...	...	18
1904-5,	...	...	...	22
1905-6,	...	...	...	24
1906-7,	...	...	...	24
1907-8,	...	...	...	24
1908-9,	...	...	...	26
1909-10,	...	...	...	26

A copy of the scheme will be found in the Appendices, page 242.

The scheme of prizes for cottages and small farms (printed in the Appendices, page 223), was put into operation during 1910 in all counties with the exceptions of Antrim, Armagh, Carlow, Louth and Sligo. The adjudications were carried out by the instructors in agriculture, but no instructor noted in the district of which he had charge under the scheme of instruction in agriculture.

Competition in the cottage section was confined to *bona fide* cottagers, as defined by the county committee. Cottagers on whose holdings demonstration plots in connection with the scheme of instruction in horticulture were situated were ineligible to compete. Only *bona fide* farmers who reside on their farms and worked the farms themselves were eligible to compete in the small farm section.

The following table shows the number of administrative counties in which the scheme was in operation, the number of holdings entered for competition each year, and the number and the total value of the prizes awarded during the past ten years:—

Year.	No. of Counties.	No. of Entries.	No. of Prizes Awarded.	Amount Expended in Prizes.
1901, . . . .	2	—*	168	£ 309
1902, . . . .	8	—*	588	1,046
1903, . . . .	19	—*	1,066	1,972
1904, . . . .	25	3,965	1,534	2,837
1905, . . . .	27	3,141	2,008	3,476
1906, . . . .	31	3,975	2,551	4,035
1907, . . . .	31	3,905	2,501	4,267
1908, . . . .	30	3,819	2,417	4,179
1909, . . . .	28	4,094	2,507	4,790
1910, . . . .	26	4,069	2,488	4,470†

\* Accurate figures cannot be given.

† Estimated.

With a view to encouraging the application of scientific principles in the cultivation and general management of farms situated in the counties of Cork and Meath, the committees again offered prizes for the best kept tillage farms. The main points considered by the judges in making their awards were: (1) efficiency of cultivation and judicious character of cropping, (2) the number, condition and feeding of live stock, and (3) the keeping of accounts, and general business methods.

The value of the prizes awarded, etc., since the initiation of the scheme, is set forth in the following table:—

County.	Year.	Value of Prizes offered.	No. of Entries received.	Amount expended in Prizes.
Cork, . . . . .	1907	£ 468	124	£ 461
	1908	468	210	468
	1909	441½	187	440
	1910	454½	126	—*
Meath, . . . . .	1908	195	32	195
	1909	195	23	195
	1910	195	21	195

\* Not yet available.

During the year 1909-1910 a series of from 12 to 24 lectures on veterinary hygiene was delivered in 15 PIONEER LECTURES. counties.

During the year under review the Department granted loans amounting to £400 to four societies (three of which already held loans) for the special purpose of purchasing seeds, manures or spraying materials, such loans being repayable on the 1st December following. From 1900 up to September 30th, 1910, the Department had advanced on loan £17,911 to 170 societies, and of this sum £9,127 was outstanding on the latter date. It was found necessary, for one or more of the reasons set forth in last year's report, to withdraw during the past year a number of loans which had been outstanding for varying periods.

(b.) IMPROVEMENT OF LIVE STOCK.

The horse-breeding scheme as adopted for 1910 (printed in the Appendices, page 205), differed from the previous year only in the following particular, viz.: that thoroughbred stallions were defined in Clause 10 of the scheme as those calculated to produce weight-carrying hunters and high-class harness horses. The scheme was in operation in every county during 1910, save in Kildare and Sligo, in which no funds were allocated for the purpose, and in county Tyrone, in which a special scheme was adopted.

The following table shows the number of stallions accepted—for registration—each year during the past ten years:—

YEAR.	Thoroughbred.	Clydesdale.	Shire.	Irish Drabht and Half-bred.	Total.
1901, .	97	23	8	—	128
1902, .	111	36	16	—	163
1903, .	123	48	21	—	192
1904, .	140	48	23	—	211
1905, .	154	49	26	—	229
1906, .	163	50	26	—	239
1907, .	161	51	26	38	276
1908, .	156	52	24	50	282
1909, .	153	57	25	61	296
1910, .	167	63	27	83	340

The extent of the assistance rendered by the Department in connection with the location of stallions during the past ten years was as under:—

YEAR.	Theoughbred		Clydesdale		Shire		Irish Draught and Half-bred		Total	
	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies	Loans	Subsidies
1901, .	1	2	6	—	—	1	—	—	7	3
1902, .	1	5	4	3	—	1	—	—	5	9
1903, .	6	6	2	1	1	—	—	—	9	7
1904, .	11	12	1	1	—	—	—	—	12	13
1905, .	9	7	1	1	1	1	—	—	11	9
1906, .	7	8	1	1	—	—	—	—	8	9
1907, .	4	3	—	—	—	—	2	1	6	4
1908, .	5	3	3	3	2	2	11	10	21	18
1909, .	15	9	2	1	—	—	14	7	31	17
1910, .	8	5	1	—	1	—	16	16	26	21

Particulars of the scheme of loans for the purchase of stallions will be found in the Appendices, page 217.

The selection of mares for service by registered stallions was made by judges and veterinary surgeons appointed by the Department, and was carried out in accordance with the arrangements made by the county committees.

The following table shows in respect of each of the past ten years (1) the total number of local exhibitions held for the purpose, (2) the number of mares selected, (3) the amount allocated for nominations, and (4) the amount actually expended:—

Year.	No. of Local Exhibitions of Mares held.	Number of Nominations of Mares.					Amount allocated for Nominations.	Amount expended for Nominations.
		To Thoroughbred Stallions.	To Clydesdale Stallions.	To Shire Stallions.	To Irish Draught and Half-bred Stallions.	Total.		
1901,	143	1,162	328	114	—	1,544*	£ 5,481	£ 4,682
1902,	170	1,580	528	235	—	2,343*	6,756	5,831
1903,	180	1,651	668	295	—	2,604*	6,933	6,234
1904,	210	2,610	761	373	—	3,644*	8,871	7,158
1905,	217	2,436	758	281	—	3,475*	8,687	8,122
1906,	227	2,624	743	241	—	3,608*	8,838	8,324
1907,	227	2,325	696	218	295	3,533*	8,497	8,064
1908,	227	2,257	762	214	545	3,778*	8,642	8,062
1909,	223	1,962	733	168	645	3,508*	7,841	7,490
1910,	219	1,832	766	220	653	3,463†	7,515	7,170†

\* Number actually paid for. † Estimated number to be paid for.

‡ Estimated amount to be paid.



The special regulations for 1910 made by county committees in respect of the valuation of farmers eligible to exhibit mares for nominations were as under:—

Province and County.	Limits of Valuation.			
	Higher Valuation.		Lower Valuation.	
	Proportion of Nominations allocated.	Valuation £	Proportion of Nominations allocated.	Valuation £
<b>ULSTER.</b>				
Antrim, . . . . .	$\frac{1}{4}$	150	$\frac{1}{4}$	75
Armagh, . . . . .	—	Unlimited	No Regulations	—
Cavan, . . . . .	—	50	No Regulations	—
Donegal, . . . . .	$\frac{1}{4}$	150	$\frac{1}{4}$	40*
Down, . . . . .	$\frac{1}{4}$	150	$\frac{1}{4}$	12†
Fermanagh, . . . . .	$\frac{1}{4}$	75	$\frac{1}{4}$	40
Londonderry, . . . . .	$\frac{1}{4}$	100	$\frac{1}{4}$	50
Monaghan, . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	40
Tyrone, . . . . .	$\frac{1}{4}$	100	$\frac{1}{4}$	30
	Special Scheme	—	—	—
<b>MUNSTER.</b>				
Clare, . . . . .	$\frac{1}{4}$	200	$\frac{1}{4}$	50
Cork, { W.R., . . . . .	$\frac{1}{4}$	150	$\frac{1}{4}$	30
{ E.R., . . . . .	$\frac{1}{4}$	200	$\frac{1}{4}$	50
Kerry, . . . . .	—	100	No Regulations	—
Limerick, . . . . .	—	50	No Regulations	—
Tipperary, N.R., . . . . .	$\frac{1}{4}$	125	$\frac{1}{4}$	50
Tipperary, S.R., . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	80
Waterford, . . . . .	$\frac{1}{4}$	200	$\frac{1}{4}$	75
<b>LEINSTER.</b>				
Carlow, . . . . .	$\frac{1}{4}$	150	$\frac{1}{4}$	50
Dublin, . . . . .	$\frac{1}{4}$	300	$\frac{1}{4}$	100
Kildare, . . . . .	—	No Scheme.	—	—
Kilkenny, . . . . .	—	50	No Regulations	—
King's, . . . . .	$\frac{1}{4}$	75	$\frac{1}{4}$	40
Longford, . . . . .	$\frac{1}{4}$	200	$\frac{1}{4}$	50
Louth, . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	50
Meath, . . . . .	$\frac{1}{4}$	200	$\frac{1}{4}$	50
Queen's, . . . . .	—	40	No Regulations	—
Westmeath, . . . . .	$\frac{1}{4}$	100	$\frac{1}{4}$	50
Wexford, . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	51
Wicklow, . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	50
<b>CONNAUGHT.</b>				
Galway, . . . . .	$\frac{1}{4}$	300	$\frac{1}{4}$	30
Letchin, . . . . .	$\frac{1}{4}$	Unlimited	$\frac{1}{4}$	20
Mayo, . . . . .	$\frac{1}{4}$	30	$\frac{1}{4}$	15
Roscommon, . . . . .	$\frac{1}{4}$	40	$\frac{1}{4}$	20
Sligo, . . . . .	No Scheme	—	—	—

\* Non-congested districts.

† Congested districts.

The following table shows the extent to which the scheme was availed of by farmers in each of the counties concerned:—

Province and County.	Number of Local Exhibitions arranged by County Committee.	Number of Mares competing for free nominations.	Number of Mares declared suitable by Judge and Veterinary Surgeon for free nominations.		
			"Se-lected."	"Re-served."	TOTAL.
ULSTER.					
Antrim, . . . .	6	428	175	40	215
Armagh, . . . .	3	94	28	12	40
Cavan, . . . .	8	320	90	45	135
Donegal, . . . .	11	275	126	23	149
Down, . . . .	12	393	150	58	208
Fermanagh, . . . .	6	146	50	19	69
Londonderry, . . . .	4	295	90	34	124
Monaghan, . . . .	6	215	94	39	133
Tyrone, . . . .	—	—	—	—	—
Totals for Ulster, . . . .	56	2,166	803	270	1,073
MUNSTER.					
Clare, . . . .	7	671	209	51	251
Cork, s. . . .	18	1,071	250	130	400
Kerry, . . . .	8	508	173	45	220
Limerick, . . . .	8	292	100	32	132
Tipperrary, N.R., . . . .	4	453	140	42	182
Tipperrary, S.R., . . . .	8	671	304	45	350
Waterford, . . . .	6	276	100	58	158
Totals for Munster, . . . .	59	3,937	1,269	404	1,673
LEINSTER.					
Carlow, . . . .	4	122	30	25	55
Dublin, . . . .	12	257	159	53	203
Kildare, . . . .	—	—	—	—	—
Kilkenny, . . . .	8	289	165	38	143
King's, . . . .	6	267	50	24	74
Longford, . . . .	3	216	60	14	74
Louth, . . . .	3	166	52	22	74
Meath, . . . .	8	737	108	23	131
Queen's, . . . .	5	187	65	40	105
Westmeath, . . . .	8	312	100	36	136
Wexford, . . . .	4	474	150	62	212
Wicklow, . . . .	7	440	149	53	193
Totals for Leinster, . . . .	68	3,987	1,019	390	1,409
CONNAUGHT.					
Galway, . . . .	11	655	200	46	246
Letchin, . . . .	7	227	60	51	111
Mayo, . . . .	9	534	165	64	229
Roscommon, . . . .	9	318	93	32	125
Sligo, . . . .	—	—	—	—	—
Totals for Connaught, . . . .	36	1,734	518	193	713
Totals for Ireland, . . . .	219	10,804	3,600	1,259	4,859

Of the 10,804 mares presented, 5,465, or 50.6 per cent., were passed by the judges as possessing sufficient merit to qualify for nominations, but of these the veterinary surgeons rejected 606 as unsound.

Over 72 per cent. of the nominations awarded were given to mares 6 years of age and under.

With the following exceptions all the county committees fixed the value of the nomination fee at £2 for the season 1910, viz.: £3 for all breeds in county Dublin; £3 for thoroughbreds and £2 for Irish draughts and half-breeds in county Longford; and £3 for thoroughbreds and £2 for all other breeds in counties Limerick and Meath.

The experimental scheme adopted by the Tyrone county committee in 1909 was continued on the same lines in 1910. The committee selected ten registered stallions standing for service in the county, viz.: two thoroughbreds, five clydesdales, one shire and two half-breeds. A premium of £40 was offered for each of the thoroughbred sires in consideration of serving forty mares, and £30 for the other breeds for the service of forty-five mares each. The mares, which were the property of farmers in the county, each of whose valuation did not exceed £100 were not selected at special exhibitions nor subjected to the veterinary examination required under the Department's general scheme.

The service fee payable in the case of thoroughbred sires was £1 per mare and in all other cases 10/-. A total of 404 mares were served under this special scheme viz.: 62 by thoroughbred stallions and 342 by the others.

The amounts paid in 1910 to stallion owners were as follows:—

	£
Full premium for one thoroughbred stallion, ...	40
Part premium for one thoroughbred stallion, ...	23
Full premiums for five clydesdale stallions, ...	150
Full premium for one shire stallion, ...	30
Full premium for one half-bred stallion, ...	30
Part premium for one half-bred stallion, ...	18
	<hr/> £290

The following particulars as to the results of the service of 315 mares under this scheme in 1909 have been furnished by the county committee: 151 foals were produced (84 male and 67 female); in 97 cases no foals were obtained; and in the remaining 67 cases no information could be procured.

The following table indicates the extent to which the Department made special provision in 1910 for the congested areas by placing stallions in remote districts, at a nominal service fee:—

County.	Breed of Stallion.	Place of Location.
Donegal, . . .	Half-bred, . . .	Dungloe.
" . . .	do., . . .	Arassmore Island.
Galway, . . .	do., . . .	Raker.
" . . .	do., . . .	Costello.
Kerry, . . .	* Welsh Cob, . . .	Glencar.
" . . .	do., . . .	Saem.
Leitrim, . . .	Half-bred, . . .	Mohill.
Mayo, . . .	Thoroughbred, . . .	Belmullet.
" . . .	Half-bred, . . .	Belmullet.
" . . .	do., . . .	Achill Sound.
" . . .	* Welsh Cob, . . .	Clare Island.
" . . .	do., . . .	Claremorris.

\* Formerly the property of the Congested Districts Board.

The experiment started by the Department in 1906 with the view to meeting a demand for half-bred sires was continued in 1910, and during that year the Department purchased forty-one colts. Of the colts purchased in 1908 and 1909, nineteen were considered suitable for stud purposes and were accordingly placed on the Department's register for 1910, ten were disposed of as geldings and three were retained pending further inspection.

During the year under review the Department made provision for the location of a number of stallion asses in poor districts in which donkeys are largely used and where there is a demand for the service of suitable sires, and for this purpose fifty stallion asses were placed with caretakers who held themselves responsible to the Department for the proper care and treatment of the animals while in their possession.

The asses were placed as follows:—

County.	District in which Located.	County.	District in which Located.
Cavan, .	Bellinagh.	Leitrim, .	Annaghmore.
Cork, .	Skibberen (two)- Macroom.		Meath.
			Fenagh.
			Drumshanbo.
Donegal, .	Arranmore Island.		Drumree.
	Brackless.		Ballinamore.
	Bartonport.	Mayo, .	Ballina.
	Fraser.		Westport.
Fermanagh, .	Erinestown.		Ballinlough.
Galway, .	Ballymacward.		Killala.
	Woodlawn.		Knock.
	Craughwell.		Killrilly.
	Abbey.		Inishork Island.
	Anghra.	Roscommon,	Athleague.
	Williamstown.		Athlone.
Kerry, .	Cahirdaniel.		Donnan.
	Masteragoe.		Kilcocky.
	Ballyangford.		Ballyvaughan.
	Glencar.		Ballyvaughan.
	Valentia Island.		Frenchpark.
	Cucklegregory.		Ballyvaughan.
	Lixnaw.	Sligo, .	Collooney.
	Ballyvaughan.		Collooney.
	Keshmure.		Castledillon.
	Tuaslet.		
	Ballinskelligs.		

The continued popularity of the cattle-breeding scheme is shown by the fact that it was again adopted by every county committee of agriculture. A copy of the scheme is printed in the Appendices, page 211.

The amounts allocated for and actually expended upon premiums for bulls by county committees during each of the past three years were as follows:—

Year.	Amount Allocated.	Amount Expended.
	£	£
1908, .	13,410	11,886
1909, .	13,287	11,967
1910, .	13,902	12,250*
	* Estimated.	

In 1908 the value of the premium was £15 in the case of all pure-bred bulls, except those of the Kerry, Dexter and Galloway breeds, for which the premium was £10 each.

In 1909 and 1910, while the value of the premium for Kerry, Dexter, Galloway or Registered Dairy bulls was fixed at £10, county committees were given power to determine, between the

limits of £10 and £15, the value of the premium for any one or more of the other recognised breeds. This discretion, as mentioned in the Annual Report for 1908-9, was exercised in 1909 by the committees for counties Fermanagh and Londonderry only. In the year just closed the £15 standard for all breeds and ages was adopted, save in the following particular cases:—In Fermanagh, the premium was fixed at £13; in Londonderry, £12 10s. for bulls awarded premiums for the first time in 1909 and 1910; in Antrim, £12 for bulls awarded premiums in 1910 for the first time, and in Longford, £10 for bulls other than shorthorns.

The following table shows the number of loans granted in each of the past ten years for the purchase of bulls. (Particulars of the scheme are printed in the Appendices, page 218):—

Year.	No. of Loans granted for the purchase of bulls		
1901,	...	...	54
1902,	...	...	86
1903,	...	...	106
1904,	...	...	122
1905,	...	...	147
1906,	...	...	135
1907,	...	...	181
1908,	...	...	140
1909,	...	...	174
1910,	...	...	209

The county committees made provision for the award in 1910 of 911 premiums, and allocated for this purpose sums amounting in the aggregate to £13,802 from the joint fund. Of the 812 bulls which were awarded premiums in 1909, 655 were eligible to compete for premiums in 1910. The Department's Inspectors attended at 436 centres throughout the country for the purpose of examining such of those 655 animals as might be offered for premiums in 1910, and altogether 516 bulls were inspected. Of these 512 were considered suitable for the requirements of the scheme. Twenty-eight of these bulls were, however, for various reasons, withdrawn, thus reducing the number available to 484. The committees selected applicants to take up the remaining premiums.

The following statement shows by provinces and counties the distribution of premium bulls in 1910. The province of Ulster procured 96 per cent., Leinster 98 per cent., Connaught 96 per cent., and Munster 75 per cent. of the total number of bulls for which provision had been made in the county schemes. The thirty-three county committees allocated funds for premiums to 911 bulls, and premiums were actually awarded to 841 bulls, being only 8 per cent. under the number required.

Provinces and County.	Number of Premiums provided by County Committee for 1910.	Number of Bulls continued from 1909.	Number of Bulls provisionally awarded Premiums for first time in 1910.	Total Number of Bulls approved for Premiums in 1910.
<b>ULSTER :</b>				
Antrim, . . .	59	21	35	56
Armagh, . . .	30	15	15	30
Cavan, . . .	28	9	19	28
Donegal, . . .	37	28	9	37
Down, . . .	67	35	31	66
Fermanagh, . .	26	17	6	23
Londonderry, .	38	30	12	32
Monaghan, . .	22	9	12	21
Tyrone, . . .	51	16	33	51
<b>Totals for Ulster,</b>	<b>358</b>	<b>170</b>	<b>174</b>	<b>344</b>
<b>MUNSTER :</b>				
Clare, . . .	29	12	6	18
Cork, . . .	65	42	15	55
Kerry, . . .	24	10	7	17
Limerick, . . .	36	2	7	9
Tipperary (N.R.), .	17	10	7	17
Tipperary (S.R.), .	14	7	7	14
Waterford, . . .	7	2	5	7
<b>Totals for Munster,</b>	<b>183</b>	<b>85</b>	<b>52</b>	<b>137</b>
<b>LEINSTER :</b>				
Carlow, . . .	13	8	5	13
Dublin, . . .	13	12	3	15
Kildare, . . .	21	12	8	20
Kilkenny, . . .	31	17	13	30
King's, . . .	18	10	8	18
Longford, . . .	9	8	1	9
Louth, . . .	14	10	4	14
Meath, . . .	33	19	11	30
Queen's, . . .	16	12	4	16
Westmeath, . . .	30	19	11	30
Wexford, . . .	27	14	13	27
Wicklow, . . .	18	12	6	18
<b>Totals for Leinster,</b>	<b>245</b>	<b>153</b>	<b>67</b>	<b>240</b>
<b>CONNUGHT :</b>				
Galway, . . .	30	24	6	30
Letter, . . .	15	9	6	15
Mayo, . . .	30	19	5	24
Roscommon, . . .	21	11	8	19
Sligo, . . .	33	13	19	32
<b>Totals for Connought,</b>	<b>125</b>	<b>76</b>	<b>44</b>	<b>120</b>
<b>Totals for Ireland,</b>	<b>911</b>	<b>484</b>	<b>357</b>	<b>841</b>

TABLE showing the ages and breeds of bulls selected for and awarded premiums under the scheme as administered by the county committees during each of the past ten years:—

YEAR.	Ages.				Breeds.				Total No. of Bulls awarded Premiums.
	Year-Engs.	Two-year-olds.	Three-year-olds.	Four-year-olds.	Short-horn.	Aberdeen Angus.	Hereford.	Other Breeds	
1901.	200	160	—	—	247	57	43	3	350
1902.	292	132	—	—	337	52	26	9	424
1903.	402	216	—	—	473	78	58	9	618
1904.	334	315	83	—	557	99	63	15	734
1905.	276	299	189	34	599	104	48	24	795
1906.	302	251	196	72	617	117	67	20	821
1907.	282	281	178	72	694	122	61	26	813
1908.	268	267	205	60	690	123	61	18	800
1909.	295	247	200	70	579	134	78	21	812
1910.	325	287	164	65	579	160	75	27	841*

\* Number of premiums provisionally awarded.

The following table shows how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1910:—

County.	Short-horn.	Aberdeen Angus.	Hereford.	Red Leicester.	Galloway.	Kerry.	Registered Dairy.	Totals.
ULSTER.								
Antrim.	46	2	—	—	5	—	3	56
Armagh.	29	1	—	—	—	—	—	30
Cavan.	20	5	3	—	—	—	—	28
Donegal.	22	12	—	—	3	—	—	37
Dows.	59	7	—	—	—	—	—	66
Fermanagh.	14	8	—	—	—	—	1	23
Londonderry.	28	1	—	—	—	—	3	32
Monaghan.	21	—	—	—	—	—	—	21
Tyrone.	41	9	—	—	—	—	1	51
Totals for Ulster.	290	45	3	—	8	—	8	344
MUNSTER.								
Clare.	14	4	—	—	—	—	—	18
Cork.	44	10	—	1	—	—	—	55
Kerry.	6	11	—	—	—	1	—	17
Limerick.	6	1	—	—	—	—	3	9
Tipperary, N.R.	14	1	2	—	—	—	—	17
Tipperary, S.R.	9	2	3	—	—	—	—	14
Waterford.	5	2	—	—	—	—	—	7
Totals for Munster.	96	31	5	1	—	1	3	137



The following table shows how the premiums were distributed among the breeds selected by the county committees to stand for premiums in 1910 (continued):—

County.	Shorthorn.	Aberdeen Angus.	Hereford.	Red Lincoln.	Galloway.	Kerry.	Registered Dairy.	Totals.
<b>LEINSTER.</b>								
Carlow, . . .	7	5	—	—	—	—	1	13
Dublin, . . .	6	3	6	—	—	—	—	15
Kildare, . . .	16	—	4	—	—	—	—	20
Kilkenny, . . .	27	2	—	—	—	—	1	30
King's, . . .	13	3	2	—	—	—	—	18
Longford, . . .	2	3	4	—	—	—	—	9
Louth, . . .	9	3	2	—	—	—	—	14
Meath, . . .	19	3	8	—	—	—	—	30
Queen's, . . .	10	3	3	—	—	—	—	16
Westmeath, . . .	6	2	22	—	—	—	—	30
Wexford, . . .	25	2	—	—	—	—	—	27
Wicklow, . . .	8	10	—	—	—	—	—	18
<b>Totals for Leinster, .</b>	<b>148</b>	<b>39</b>	<b>51</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>2</b>	<b>240</b>
<b>CONNAUGHT.</b>								
Galway, . . .	22	1	6	—	1	—	—	30
Letcham, . . .	5	9	1	—	—	—	—	15
Mayo, . . .	10	11	—	—	3	—	—	24
Roscommon, . . .	6	5	8	—	—	—	—	19
Sligo, . . .	12	19	1	—	—	—	—	32
<b>Totals for Connaught,</b>	<b>55</b>	<b>45</b>	<b>16</b>	<b>—</b>	<b>4</b>	<b>—</b>	<b>—</b>	<b>120</b>
<b>Totals for Ireland, .</b>	<b>579</b>	<b>160</b>	<b>75</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>13</b>	<b>841</b>

The regulations as to ownership of cows and as to the number of cows to be served in order to qualify for payment of a premium, were the same as in 1909.

The following is a summary of the regulations for 1910 made by each county committee in regard to qualifications of cow-owners and amount of service fee:—

Province and County.	Qualification of cow owners as to valuation and service fee as fixed by County Committees.
<b>ULSTER.</b>	
Antrim, . . . .	£100. 1/- fee in all cases.
Armagh, . . . .	£20 for 1/- fee. Unlimited for 2/6 fee.
Cavan, . . . .	£50. 1/- fee in all cases.
Donegal, . . . .	£150. In Congested Districts three-fourths of the prescribed number of cows to belong to farmers under £20 valuation. 1/- fee in all cases.
Down, . . . .	£40 for 1/- fee. £75 for 2/6 fee.
Fermanagh, . . . .	£15 for 1/- fee. £100 for 2/6 fee.
Londonderry, . . . .	No limit. 1/- fee in all cases.
Monaghan, . . . .	£40 for 1/- fee. £100 for 2/6 fee.
Tyrone, . . . .	£30 for 1/- fee. £100 for 2/6 fee.
<b>MUNSTER.</b>	
Clare, . . . .	£75. 1/- fee in all cases.
Cork, . . . .	£150 in West Riding and £200 in East Riding. 1/- fee in all cases.
Kerry, . . . .	£20 for 1/- fee. £100 for 2/6 fee.
Limerick, . . . .	£30 for 1/- fee. Unlimited for 2/6 fee.
Tipperary, N.R., . . . .	£30 for 1/- fee. £100 for 2/6 fee.
Tipperary, S.R., . . . .	£30 for 1/- fee. £80 for 2/6 fee.
Waterford, . . . .	£30 for 1/- fee. £150 for 2/6 fee.
<b>LEINSTER.</b>	
Carlow, . . . .	£100 for 1/- fee. £200 for 2/6 fee.
Dublin, . . . .	No limit. 1/- fee in all cases.
Kildare, . . . .	£75 for 1/- fee. £150 for 2/6 fee.
Kilkenny, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
King's, . . . .	£100. 1/- fee in all cases.
Longford, . . . .	£100. 1/- fee in all cases.
Louth, . . . .	No limit. 1/- fee in all cases.
Meath, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
Queen's, . . . .	£40 for 1/- fee. £100 for 2/6 fee.
Westmeath, . . . .	£50 for 1/- fee. £100 for 2/6 fee.
Wexford, . . . .	£100. 1/- fee in all cases.
Wicklow, . . . .	£150 for 1/- fee.
<b>CONNAUGHT.</b>	
Galway, . . . .	£30. 1/- fee in all cases.
Leitrim, . . . .	£20 for 1/- fee. Unlimited for 2/6 fee.
Mayo, . . . .	£15. 1/- fee in all cases.
Roscommon, . . . .	£20. 1/- fee in all cases.
Sligo, . . . .	£25. 1/- fee in all cases.

The cattle-breeding scheme, as administered through the committees of the counties containing congested areas, was again supplemented by the Department. By this arrangement the Department placed a number of bulls for service in congested districts on terms similar to those mentioned at pages 48 and 49 of the Ninth Annual Report.

The following figures show the extent of the supplemental aid given by the Department in this manner during 1910:—

County.	No. of Special Premiums in 1910.	No. of Bulls sold at reduced prices during 1910.	No. of Bulls sold at reduced prices in previous years and retained for service in 1910.	Total.
Clare . . .	3	—	—	3
Cork, . . .	11	2	6	19
Donegal, . . .	35	6	3	44
Galway, . . .	12	15	14	41
Kerry, . . .	33	2	6	41
Leitrim, . . .	15	—	—	15
Mayo, . . .	19	10	13	42
Westmeath, . . .	7	—	—	7
Totals, . . .	135	35	42	212

The figures for each year since 1904, when the Department's operations were first extended to congested districts, are given in the following table:—

YEAR.	Number of Special Premiums granted by the Department for Congested Districts.	Number of Bulls sold at reduced prices to residents in Congested Districts.
1904, . . .	8	—
1905, . . .	33	—
1906, . . .	51	25
1907, . . .	81	30
1908, . . .	95	31
1909, . . .	106	27
1910, . . .	135	35

Altogether a total of 1,053 bulls were standing in Ireland during the season 1910 in connection with the cattle-breeding schemes, viz.:—841 under county schemes and 212 under the special arrangements referred to in the above table.

The scheme for the improvement of dairy cattle by the selection and registration of dairy cows, issued by the Department for the first time in 1906, has been revised. Particulars thereof are printed in the Appendices, page 248.

REGISTRATION OF  
DAIRY CATTLE.

In the following table the progress of the scheme during the years 1906-10 is set forth:—

YEAR.	No. of cows entered.	No. submitted to inspection.	No. provisionally selected for general merit.	No. withdrawn after selection.	No. rejected on milk tests.	No. postponed for further tests.	No. accepted for entry in register.
1906,	621	595	491	149	36	—	216
1907,	178	175	155	71	10	2	72
1908,	309	354	316*	140	28	31	117 (a)
1909,	839	809	648†	—	—	—	48 (b)
1910,	585	571	468‡	—	—	—	—

\* Includes 174 Kerry cows.

† Includes 103 Kerry cows.

‡ Includes 132 Kerry cows.

(a) Includes 37 Kerry cows.

(b) Includes 4 Kerry cows.

The regulations of the scheme for encouraging improvement in swine breeding are printed in the Appendix, page 215. In 1910 the White Ulster breed was placed on an equality with all other recognised breeds in the matter of the value of the premium.

During the past year the Department, on behalf of persons selected by county committees, purchased from Irish breeders 142 boars suitable for premiums, but notwithstanding an increasing demand for boars for the purposes of this scheme, the supply of suitable animals continues to be much restricted.

Arrangements were again made for inspecting locally boars which were awarded premiums for the first time in 1909, with the view to ascertaining their eligibility for premiums in 1910. Of the 135 inspected, 133 were passed as suitable, and of these 126 were awarded second year premiums.

The following is a summary of the operations of the scheme during the past ten years:—

YEAR.	Money allocated by County Committees for Boar Premiums.	Money expended by County Committees for Boar Premiums.	Number of Premiums awarded by County Committees.	Number of Special Premiums provided by Department for Congested Districts.	Total number of Boars standing in Ireland during Service Season.
	£	£			
1901, .	2,395	752	151	—	151
1902, .	2,685	726	154	—	154
1903, .	2,530	879	181	—	181
1904, .	2,070	624	129	—	129
1905, .	1,740	840	205	10	215
1906, .	1,588	1,141	269	23	292
1907, .	1,618	1,171	287	51	338
1908, .	1,670	1,146	281	49	330
1909, .	1,700	1,252	310	40	350
1910, .	1,694	1,466*	344*	80*	424*

\* Estimated.

The number of premiums awarded by each county committee was as follows:—

County.	No. of First year premiums.	No. of Second year premiums.	Large White Yorks.	Large Blacks.	White Usters.	Total.
<b>ULSTER.</b>						
Antrim, . . . . .	4	4	—	—	8	8
Armagh, . . . . .	5	1	1	2	8	6
Cavan, . . . . .	8	1	2	—	7	9
Down, . . . . .	8	2	2	2	6	10
Donegal, . . . . .	6	4	1	—	9	10
Fermanagh, . . . . .	4	1	1	—	4	5
Londonderry, . . . . .	6	2	—	1	7	8
Monaghan, . . . . .	8	2	—	—	10	10
Tyrone, . . . . .	7	6	2	—	11	15
<b>Totals for Ulster, . . . . .</b>	<b>56</b>	<b>23</b>	<b>9</b>	<b>5</b>	<b>65</b>	<b>79</b>
<b>MUNSTER.</b>						
Clare, . . . . .	4	8	12	—	—	12
Cork, . . . . .	11	9	20	—	—	20
Kerry, . . . . .	9	3	12	—	—	12
Limerick, . . . . .	2	3	5	—	—	5
Tipperary (N.R.), . . . . .	9	1	10	—	—	10
Tipperary (S.R.), . . . . .	1	2	4	—	—	4
Waterford, . . . . .	—	—	—	—	—	—
<b>Totals for Munster, . . . . .</b>	<b>36</b>	<b>27</b>	<b>63</b>	<b>—</b>	<b>—</b>	<b>63</b>
<b>LEINSTER.</b>						
Carlow, . . . . .	2	2	4	—	—	4
Dublin, . . . . .	1	2	3	—	—	3
Kildare, . . . . .	3	4	5	1	1	7
Kilkenny, . . . . .	10	2	12	—	—	12
King's, . . . . .	11	2	12	1	—	13
Longford, . . . . .	4	1	3	2	—	5
Louth, . . . . .	4	2	4	—	2	6
Meath, . . . . .	3	1	3	1	—	4
Queen's, . . . . .	9	3	12	—	—	12
Westmeath, . . . . .	6	4	7	3	—	10
Wexford, . . . . .	13	7	16	3	1	20
Wicklow, . . . . .	2	2	4	—	—	4
<b>Totals for Leinster, . . . . .</b>	<b>68</b>	<b>32</b>	<b>85</b>	<b>11</b>	<b>4</b>	<b>100</b>
<b>CONNAUGHT.</b>						
Galway, . . . . .	29	11	31	—	—	31
Letchin, . . . . .	3	3	2	4	—	6
Mayo, . . . . .	12	15	26	1	—	27
Roscommon, . . . . .	8	11	18	1	—	19
Sligo, . . . . .	14	5	19	—	—	19
<b>Totals for Connaught, . . . . .</b>	<b>57</b>	<b>45</b>	<b>95</b>	<b>6</b>	<b>—</b>	<b>102</b>
<b>Totals for Ireland, . . . . .</b>	<b>217</b>	<b>127</b>	<b>263</b>	<b>22</b>	<b>69</b>	<b>344</b>

The operations of county committees under this scheme in the congested counties were supplemented by the Department, who in 1910, arranged for the payment out of their own funds of premiums to eighty boars standing for service in the nine counties concerned.

TABLE showing the premiums awarded to boars in 1910 entirely from the Department's own funds:—

County.	No. of First year premiums value £5.	No. of Second year premiums value £3	Total.
Clare, . . . . .	2	—	2
Cork, . . . . .	3	—	3
Donegal, . . . . .	7	3	10
Galway, . . . . .	11	5	16
Kerry, . . . . .	9	7	16
Letchim, . . . . .	3	1	4
Mayo, . . . . .	14	8	22
Roscommon, . . . . .	3	2	5
Sligo, . . . . .	2	—	2
<b>Totals, . . . . .</b>	<b>54</b>	<b>26</b>	<b>80</b>

The committees of counties Down and Tyrone again made provision for the location of rams in the sheep-breeding districts of those counties, and for this purpose they purchased ten and eight rams respectively.

The following shows the number of rams distributed by the Department at reduced prices to residents in congested districts during the past six years:—

Year.	No. of Rams.
1905, . . . . .	15
1906, . . . . .	79
1907, . . . . .	117
1908, . . . . .	96
1909, . . . . .	102
1910, . . . . .	93

In accordance with the conditions under which grants were made by county committees to agricultural show societies, prizes for sheep were provided at all subsidised shows.

Particulars of the scheme of subsidies to shows will be found in the Appendices, page 220. The Department have had occasion from time to time during the past few years to draw attention to many instances in which difficulty has been experienced in securing compliance with the regulations of this scheme. Statements of the financial position

of the societies applying for grants have not been submitted in proper time, nor have the draft schedules of prizes been presented through the county committees for the Department's consideration before being printed. Furthermore, the amount expended on administration has been frequently out of all proportion to the aggregate value of the prizes actually distributed. It has been pointed out to the committees administering the grants that unless more regard is paid to economy in administration the Department will not in future be prepared to approve of grants being made to societies which show a tendency to disregard this essential condition. A marked improvement in the foregoing respects has been observable during the year 1910.

The following table shows the progress of the scheme since its inception:—

	Subsidies granted to Shows.		Skilled Labour Competitions (Ploughing Matches, etc.)		Local Competitions. (Poultry Trussing, Butter-making, etc.)	
	Number.	Amount.	Number	Amount.	Number	Amount.
		£ s. d.		£ s. d.		£ s. d.
1901.	61	4,384 4 9	—	—	—	—
1902.	81	4,472 8 6	—	—	—	—
1903.	121	6,233 1 11	—	—	—	—
1904.	123	6,384 14 0	—	—	10	49 2 6
1905.	125	6,395 16 6	—	—	56	106 10 10
1906.	147	6,728 12 7	16	117 15 0	50	109 8 5
1907.	142	6,876 15 0	34	206 16 8	35	95 6 8
1908.	152	6,697 8 8	47	243 0 0	45	99 14 1
1909.	146	6,746 9 0	59	265 14 7	58	112 2 0
1910.*	142	6,254 6 1	61	271 8 0	2	30 18 6

\* Estimated.

In addition to the foregoing provision the Department, in 1910, defrayed from their own funds the cost of prizes offered with their approval by certain show societies in the counties of Antrim, Cork, Down, Kilkenny, Londonderry, Tipperary (S.R.) and Tyrone in connection with classes for dairy cattle, poultry trussing and butter-making. The total amount paid for this purpose was £137. The Department also made a special grant of £30 to the Waterford Agricultural Show Society over and above the subsidy paid by the county committee to the society in question.

The experimental scheme of veterinary dispensaries, established in county Wexford for the first time in 1908 was continued during the year under review. The experiment was carried out under the supervision of the county committee, who made all the necessary local arrangements.

The results of the field experiments conducted by itinerant instructors in agriculture during 1909 were published in the Department's JOURNAL for January, 1910, and circulated in pamphlet form among farmers in time for the sowing of last season's crops. These experiments were in continuation of the scheme adopted in 1902, and slightly modified in 1906, and extended and modified further in 1908 and 1909. Particulars of the scheme are given in pages 251 to 256 of the Appendices. In certain counties special experiments not included in the scheme were undertaken in order to test the value of new nitrogenous manures, and also of nitrobacterine cultures as applied in the inoculation of the seed of certain leguminous crops.

The following table shows the number of experiments of each class undertaken in respect of each of the principal crops in the year 1909:—

Crop.	Manurial Experiments.	Variety of Seed Experiments	Other Tests.	Total.
Potatoes, . . .	100	79	52	240
Turnips, . . .	135	32	—	167
Mangels, . . .	74	20	—	94
Oats, . . .	42	22	—	64
Wheat, . . .	1	19	—	20
Hay, . . .	21	—	—	21
Others, . . .	29	28	12	69
	411	200	64	675

During the season 1910, further slight modifications were introduced into the scheme. In all, 671 experiments and 2,036 demonstrations were laid down. Reports on the 1910 experiments are being prepared for publication.

Special large scale experiments in the growing of wheat and barley were conducted by the Department during 1910 in certain counties, in addition to the experiments carried out by the instructors. Particulars of these will be found below.

A third series of manurial experiments with the flax crop was instituted in 1909, and this was designed to supplement the information gained from the experiments carried out in 1901-4, and the subsequent series conducted in 1905-8. In the year under review trials of muriate of potash alone and of that manure in conjunction with small quantities of a nitrogenous manure and also with steamed bone flour were made at ten centres. Seed imported by the Department from Russia and Holland was sown at ten centres alongside plots on which brands of Riga and Dutch seed generally sold in Ulster were used. Seed obtained by the Department from four other districts of Russia was also grown



for test purposes on three farms, and trials of seed obtained from selected flax plants of home-grown crops were continued. The results of these experiments are now available for publication in the Department's JOURNAL and for issue in leaflet form.

For the information of flax growers, and their guidance in the purchase of seed, a leaflet was issued early in 1910 embodying the information collected by the Department as to the 1909 harvest of flax-seed for sowing purposes in Holland and Russia.

The report of a deputation of flax growers and instructors, sent by the Department to the flax-growing districts of Holland and Belgium in July, 1909, has been published in the Department's JOURNAL.

Grants, equivalent to half the salaries of approved managers, were made by the Department during the scutching season, 1909-10, to two co-operative flax societies. A third society to which a similar grant had been paid for the two previous years did not work a scutch-mill in 1909-10. Five other societies continued their operations without financial assistance from the Department, but the services of the Department's experts were given to these as well as to the two first-mentioned societies.

The employment of the whole-time instructor, appointed in 1908 to assist flax-growers in county Cork, was continued. Assistance was also given to the two scutch mill owners there to enable them to employ Ulster scutchers, who trained local hands. The growers again received more satisfactory returns from their crop, and this resulted in a further increased acreage in that county.

The committees for counties Down and Fermanagh adopted Section A. of the Department's scheme for improvement in the flax-growing industry, and offered prizes to the total value of £202 10s. at shows for scutched flax. The committees of counties Cork, Donegal, Londonderry, Monaghan and Tyrone adopted Section B. of the scheme, and offered prizes for flax on foot, for which 958 entries were received. The total value of the prizes awarded to competitors in these counties was £394 5s. A copy of the Department's scheme for encouraging improvement in the flax-growing industry will be found in the Appendices, page 224.

The Vice-President of the Department, in December, 1909, appointed a committee "to inquire into the present state of the flax-growing industry in Ireland, and the causes which are contributing to the decline of that industry, and to submit recommendations." During the period under review the committee held a number of public sittings for the reception of oral evidence, and it is expected that they will be in a position to report early in 1911.

The experiments relating to early potato growing were continued in 1910 in counties Waterford and Wexford. The crops escaped injury from late spring frosts, and digging commenced early in June. The yields were satisfactory, but prices were only moderate.

EARLY POTATO  
GROWING.

The growers in three districts, viz., Youghal (Cork), Kilmore (Wexford), and Dungarvan (Waterford), have now formed societies to assist the members in all matters concerning the production and disposal of the crop.

A report of the experiments will be published in the Department's JOURNAL.

The experiments in barley growing carried out up to the end of season 1908 have definitely established the position of Archer and Goldthorpe as the best varieties for cultivation on the generality of barley-growing soils. In 1906 experiments were commenced to test the comparative values of Irish Archer, or the strain of Archer most generally in use in Ireland, and Danish Archer—a strain which had given very satisfactory results in Denmark. In each of the years, 1907 to 1910 inclusive, similar trials with these strains were continued with the object as above stated, and also to ascertain to what extent, if any, Danish Archer deteriorated in yielding capacity or quality by being grown in Ireland for a number of years.

In 1910 the experiments were conducted in counties Carlow, Cork, Kildare, Kilkenny, Louth and Wexford, and as a result of these experiments, viewed concurrently with those obtained from 1896 to 1909, inclusive, it has been definitely ascertained that there is no significant difference either in yield or in quality between Irish Archer and Danish Archer, and, further, that the latter variety shows no deterioration as a result of being grown in this country for a number of years.

The propagation of pure seed supplies which was commenced in 1905 was continued during 1910 on the lines originally laid down. The continuation of the supply of pure seed of the most suitable varieties has been ensured by further selections and the produce from the same has been increased in garden and field plots at Ballinacurra. As a means of disseminating the pure seed as it is raised, extension plots were sown in Cork, Kilkenny, Louth and Tipperary with the produce of the field plots grown at Ballinacurra in 1909. The produce of the extension plots was purchased by either Messrs. Guinness or local malsters to be utilised for seed purposes in 1911.

In addition to the propagation of pure seed, of tested varieties, selection of plants which show desirable modifications are made annually and sown in the nursery at the Albert Agricultural College, Glasnevin. If the desirable modifications are apparent in the produce, it is further propagated until a sufficiently large bulk is obtained with which to undertake quantitative field trials. A detailed report of the results of the experiments conducted in 1910 is in course of preparation.

Small scale experiments on plots of one-tenth of an acre with the following varieties:—Irish Archer, Danish Archer (ex Denmark, 1906), and Danish Archer (imported in 1910), were also undertaken in 1910 by itinerant instructors in agriculture at 16 centres in the following counties:—Carlow, Cork, Galway, Kerry, Kildare, Kilkenny, Queen's, Roscommon, Tipperary N.R., Tipperary S.R., and Wexford.

The scheme of wheat experiments which commenced in 1908 was formulated to ascertain by means of field experiments the best varieties of wheat to cultivate, having regard to both the milling value of the grain and the return per acre to the grower.

#### WHEAT.

The following varieties were sown in 1908 and 1909:—Red Fife, White Queen, White Stand-up and Square Head Master. Of these Square Head Master and White Stand-up have proved the most prolific but deficient in milling quality, while White Queen showed an inferior yield and not a very high quality. Red Fife has given what, in comparison with the other three varieties, may be termed a poor yield, but has produced grain of undoubtedly high milling value.

In 1910, as the Square Head Master produced grain of so poor a quality, it was replaced by Red Chaff White, and the experiments were continued in the following counties:—Carlow, Cork, Dublin, and Kildare.

Members of the Irish Millers' Association purchased the produce of the several plots and have kindly undertaken to mill each lot separately. As in 1908 and 1909 arrangements will be made to have the flours so produced tested by bakers in Dublin.

The cultivation of pure seeds of the varieties under experiment has advanced another stage, and it is hoped that by the end of next year sufficient seed will be available for experimental purposes and also to sow extension plots.

The produce of the milling plots of 1909 was milled towards the end of last year, and the firms who undertook this work have kindly furnished the Department with a report on the milling value of the four varieties. These reports substantiated those of 1908, the Red Fife again heading the list and the Square Head Master retaining its position as the least valuable milling variety. The baking trials which were kindly carried out by three Dublin baking companies agree in placing Red Fife in the premier position and Square Head Master last, but vary slightly in their relative estimation of the other two varieties.

A detailed report of the results of the field experiments with wheat in 1910 is in course of preparation.

Tests of varieties of seed were also carried out on plots of from one-eighth to one-fourth acre by the itinerant instructors in agriculture at 26 centres in the following counties:—Carlow, Cork, Down, Galway, Kildare, Londonderry, Mayo, Meath, Roscommon, Tipperary S.R., Tyrone, Waterford and Westmeath.

In addition to the varieties mentioned above Carter's Red Stand-up, Browick's Grey Chaff and Garton's Red King were included in some of these experiments.

The propagation of pure cultures of oats was commenced in the nursery at the Albert Agricultural College,

#### OATS.

Glasnevin, in 1908. The produce of these cultivations was sufficient to sow garden plots at Ballinacarra in 1909, from which seed was raised sufficient to sow field plots at Clonakilty in 1910. The produce of the latter plots has been reserved for seed purposes in 1911.

Further selections were made early in 1909 from the plants raised during the previous year, and were sown in the nursery in the spring of that year. The produce obtained therefrom formed the seed for the garden plots at Ballinacurra in 1910, and the oats thus obtained have been reserved to be sown in field plots in 1911. The grain obtained from the single plants sown at Glasnevin in 1910 will form the seed for the garden plots in 1911; while further selections will be sown in the nursery at the same time.

As mentioned in last year's Report, the agreements with farmers at seven of the nine centres at which the cultivation of fruit on an extensive scale was promoted by the Department, terminated on the 31st December, 1908. The agreements in respect of the remaining two centres terminated on the 31st December, 1909. Under these agreements, 175 acres in all have been planted with fruit trees, viz., 40 acres at Piltown, in county Kilkenny (comprising two centres), 15 acres at Clonakilty, in county Cork, and 20 acres at each of the following places:—Broadway in county Wexford, Dungarvan in county Waterford, Naas in county Kildare, Money more in county Londonderry, Mountbellew in county Galway, and Newmarket-on-Fergus in county Clare. A considerable additional acreage has already been planted in the neighbourhoods of Piltown, Broadway and Money more. Until, however, the trees on the experimental plots are sufficiently advanced to give their normal yield of fruit, definite conclusions cannot be drawn as to the profits to be derived by farmers in any of these districts from the cultivation of fruit as compared with other farm crops. The Department continue to afford technical advice and assistance by means of resident horticulturists in the case of the following centres:—Piltown, Broadway, Dungarvan, Mountbellew, Newmarket-on-Fergus, and Money more.

The experiments in the growing of tobacco on commercial lines, begun in the year 1904, were continued during the season of 1910. The maximum area allowed for these experiments, in respect of which a grant at the rate of £50 per acre is allowed to the growers, is 101 acres. Two growers who had been cropping, respectively, one acre in King's county and two acres in county Meath, relinquished their experiments. Two other experimenters cropped, respectively, eighteen acres and three acres under ordinary licence, in addition to their authorised experimental areas. No grants are payable on account of the additional acreage, but the results obtained will be included with those from the experimental areas proper.

In order to test the suitability of tobacco as a crop for small farms, a special "Rehandling Scheme" was put into operation during 1910. The object of this scheme is to ascertain whether small holders who do not employ hired labour for working their farms would be disposed to grow the crop for the sake of the employment which it would afford to themselves and their families.

Such persons would not be in a position to undertake heavy capital expenditure for the provision of equipment for finishing the tobacco. The scheme, therefore, provides that the tobacco grown by the small holders taking part in the experiment shall be purchased, as soon as sufficiently cured to bear removal, by growers engaged in the old series of large scale experiments who already have the barns and appliances necessary for the finishing of the crop. The experimenters who buy and re-handle the small farmers' crops are allowed a grant in respect of tobacco re-handled at the rate of £25 per acre, on condition that they afford the small growers all necessary instructions, and provide them with such curing equipment as is required. The re-handlers agree to undertake all responsibility towards the small growers in connection with the crop, and to furnish all information required by the Department as to the financial and other results of the experiments. The maximum area allowed to each small grower is one acre. It is, of course, essential that the small holdings where tobacco is grown under the scheme should lie within easy reach of the re-handling centre. The scheme was put into operation at three centres. Seven small farmers participated and cropped a total area of 4½ acres.

In view of the increasing demand for tobacco for the manufacture of nicotine for insecticides, an experiment on the growing of the crop solely for this purpose was authorised to the extent of one acre at one centre. Two roods were cropped with *Nicotiana Rustica* and two roods with *Yellow Pryor*, these species being considered likely to prove richest in nicotine. The result of this experiment is not yet available.

The Department's tobacco expert gave assistance as required to the growers at the several centres, and his time was constantly occupied with the supervision of the work. The area cropped at each experimental centre was as follows:—

			Acres.
Co. Meath,	Randalstown,	Large Scale Experiment,	. 28
Do.	do.	Rehandling do.	. 3
Do.	do.	Nicotine do.	. 1
Do.	Athlumney,	Large Scale do.	. 10
Co. Louth,	Smarmore,	do. do.	. 18
Do.	do.	Rehandling do.	. ½
King's Co.,	Mullagh and Mullacrew,	Large Scale do.	. 14
Co. Kilkenny,		do. do.	. 7
Co. Wexford,	Taggart,	do. do.	. 13
Co. Tipperary,	Cordangan,	do. do.	. 10
Co. Limerick,	Adare,	do. do.	. 22
Do.	do.	Rehandling do.	. 1½
Total,			. 122½

Pipe varieties were planted on 83½ acres; cigarette varieties on 29½ acres; cigar varieties on 8½ acres, and varieties for nicotine production on one acre.

So far as the Department are aware, only two persons, other than recognised experimenters, grew tobacco under ordinary licences in 1910. The total area covered by these licences was only  $\frac{1}{2}$  acre.

The season of 1910 was, on the whole, a fairly average one for tobacco. The earlier and later parts of the season were distinctly favourable, but the mid-season was cold and very wet. The quality of all tobaccos that were harvested early suffered from the continuous rain which fell in August. The crop is being finished for market and final weights have not yet been taken. The acreage yield is estimated to be similar to that of the preceding year, that is about 900 lbs. of cured leaf per statute acre.

The greater part of the 1909 crop was sold to manufacturers during 1910. The average price obtained was 5½d. per lb., as compared with 5½d. obtained in the previous year for the 1908 crop. The prices ranged from 4½d. to 7½d. for pipe varieties; from 2d. to 7d. for cigarette varieties, and from 6d. to 1s. 3d. for cigar varieties. As in the previous year, the price obtained for the several varieties was enhanced by about 1d., as compared with imported varieties, owing to the fact that the Excise duty on Irish-grown tobacco is 2d. per lb. less than the duty on imported leaf.

The reports of the manufacturers who purchased the 1908 crop were similar to those made on the 1907 crop. The tobacco proved useful for blending in pipe and cigarette mixtures, and for working up into roll and plug. In some cases Irish-grown tobaccos alone were used with successful results.

A further report on the results of the experimental work down to the end of the season of 1909 was published in the issue of the Department's JOURNAL for January, 1910.

At the beginning of the period under review six apprentices were in training at the Department's poultry station, Avondale, Rathdrum, county Wick. One apprentice who had already been at the station and had been temporarily absent, re-entered in November, 1909. Three of these seven apprentices left without completing their course; one qualified for the post of poultry fatterer, and three are at present undergoing the second year's course of training at the station.

As the result of an examination for apprenticeships in poultry fattening, held on the 25th January, 1910, which was attended by twelve applicants, two candidates were admitted to Avondale station. There were five apprentices in training at the end of September, 1910. During the year three county instructors in poultry-keeping attended supplementary courses in the fattening, trussing, etc., of fowl, the grading of eggs, etc.

Although there has been a steady improvement in the grading and packing of eggs, there is still much cause for complaint in regard to the very unsatisfactory methods followed by careless packers. Exception is also taken by many British buyers to the practice common amongst Irish producers of "hold-

#### POULTRY FATTENING.

#### MARKETING OF EGGS.

ing over " eggs in anticipation of a rise in prices. This is especially common amongst farmers when busy with the harvest, at which period prices generally commence to rise. Some shippers also at times adopt the same practice. A stop could easily be put to this practice by united action on the part of shippers. This would involve the formation of district associations of egg shippers for every part of the country, which is much to be desired.

The Department are glad to observe that many northern shippers have recently adopted the system of purchasing eggs by weight, a practice which has always been strongly advocated by the Department.

This trade is, on the whole, fairly satisfactory. The chief faults met with are the failure to maintain continuous supplies during late winter and spring, and the regrettable tendency of producers to market their produce before it is properly finished.

#### MARKETING OF POULTRY.

The formation of the Ulster Fruit Growers' Association, which includes the leading northern fruit growers, will, it is hoped, lead to very important results. The Association have adopted standard barrels, boxes, and grading conditions for apples, all of which have been accepted by the trade as satisfactory. The adoption by the Association of the Canadian system of barrel-packing has met with much success.

The Department have endeavoured, with beneficial results, to induce shippers of blackberries, for which fruit there has been an exceptional demand, to use 56 lb. kegs and 112 lb. keels, in lieu of the large casks commonly utilised. Several British jam buyers who had refused to buy Irish blackberries when packed in casks holding three to four cwts. were well satisfied with shipments they received in the smaller packages. There has been a pretty steady demand on British markets for good quality blackberries in chip baskets, but this class of trade has received the attention of comparatively few Irish shippers. It is to be regretted that the marketing of blackberries is greatly neglected in the south of Ireland, even in districts where the berries are exceptionally fine.

There is a considerable demand in England for bilberries, which, although growing plentifully in Ireland, are gathered only to a small extent. Irish bilberries shipped in good condition have realised a penny per pound more on British markets than bilberries imported from the Continent. The Department are endeavouring to encourage the marketing of this fruit.

There is little doubt that the trade in Irish wild fruits is capable of enormous development, and that much money might be distributed in paying for the collection of wild fruit which, owing largely to apathy, is left ungathered.

The tendency in the marketing of all fruits is towards the use of non-retailable packages.

The following is a summary of the results obtained at Ballyhaise agricultural station for the season

CHEESE-MAKING 1909:—  
EXPERIMENTS.

Milk made into cheese, . . . . .	18,412 gallons.
Curd produced, . . . . .	18,672 lb.
Ripe cheese sold, . . . . .	16,670 lb.
Shrinkage in ripening, . . . . .	11.8 per cent.
Gross value, . . . . .	£440 12s. 0d.
Net value of cheese, . . . . .	6.34d. per lb.
Net value of milk, . . . . .	5.74d. per gallon.

In 1908 the net value of milk converted into cheese was 5.97d. per gallon, while in 1909 it realised only 5.74d. per gallon. This slight difference in value is due to lower prices realised for cheese. As in 1908 the whey was fed to pigs, but owing to the prevailing high price during 1909 for store pigs the value of the whey was only equal to 15s. per cow, whereas in 1908 it was valued at £1 per cow.

There was a fairly good demand for cheese early in the season, but during the spring months the demand was dull and prices dropped.

The prices ranged from 58s. per cwt. for spring cheese to 65s. per cwt. for summer cheese sold in spring of 1910. About half the total quantity of cheese was sold in Glasgow and the remainder in Ireland.

Arrangements were made in 1909 to carry out further experiments on "all the year round" dairying during 1909-10 on one farm in each of the counties Tyrone and Cork, and also at the Munster Institute, Cork.

The experiments which are being conducted on similar lines to those of previous experiments in counties Cork and Down, were started in November, 1909. At each farm five winter calving and five spring calving cows are being kept for the purposes of the experiments which will not terminate until spring, 1911, when the spring calves of 1910 will be one year old. As in previous experiments the daily milk yield of the cows, the quantities and cost of the food given to the cows and calves, the prices obtained for butter and milk sold, and other particulars are being recorded at each centre.

It is hoped that reports on the results of the experiments will be published when the records have been completed.

An exhaustive series of dairying experiments has been carried out each year since 1906 at the agricultural station, Clonakilty. The objects of these experiments being (a) to ascertain the cost per gallon of producing milk in winter, and (b) to determine if winter dairying would pay in the south of Ireland.



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The results of these experiments, which are still in progress, will be published in due course in the Department's JOURNAL. See also page 78.

### 1. Visits of Instructors in Dairying to Creameries.

The number of creameries and auxiliary creameries participating in this scheme has gradually increased and at present amounts to 381, or, roughly speaking, 55 per cent, of the total number in Ireland. 1,807 visits were made by the Department's instructors during the year ended 30th September, 1910. As a mark of recognition the Department publish at intervals a list of those creameries and auxiliary creameries visited by the Department's instructors, which, up to the date of publication, have satisfied the Department in regard to their good condition and management.

The following table gives the number of creameries and auxiliary creameries visited by the instructors during the year, and the number included in the published Lists:—

Period 1st October, 1909, to 30th September, 1910.	Number of places visited by instructors in Dairying.		Number of visits made by the In- structors.		List of Creameries and Auxiliaries pub- lished in accordance with Clause 5 of the Scheme.		
	Creameries	Auxiliary Creameries	Creameries	Auxiliary Creameries	Date of issue	No. of Creameries on List.	No. of Auxiliary Creameries on List.
	354	237	897	910	1st Jan., 1910, 1st April, 1910, 11th July, 1910.	83 87 91	102 115 114

### 2. Surprise Butter Competitions.

When creameries are included in the list referred to in the previous paragraph they are entitled to take part in the surprise butter competitions which constitute an important feature of the scheme. A number of managers of creameries are usually invited to be present at each competition, the Department paying their travelling expenses. They are thus afforded an opportunity, after the adjudication has been completed, of conferring with the judges and with the Department's experts and of examining the exhibits.

The following table shows the number of competitions held during the year ended 30th September, 1910 :—

Telegrams Issued.	Exhibits Judged.	Number of Exhibits	Number of Prizes Awarded.	
			First Class £2	Second Class £1
27th September, 1909, .	6th October, 1909, .	74	2	6
29th September, 1909, .	6th October, 1909, .	75	3	6
25th October, 1909, .	3rd November, 1909, .	66	1	5
18th May, 1910, .	25th May, 1910, .	61	3	4
7th June, 1910, .	15th June, 1910, .	78	1	10
16th July, 1910, .	22nd July, 1910, .	82	2	7
29th July, 1910, .	5th August, 1910, .	87	2	7
22nd September, 1910, .	28th September, 1910, .	72	1	6

### 3. Creamery Certificates. Practical Training as Creamery Managers and Dairymaids.

Entrance to the examination for certificates, which is held by the Department annually in connection with their creamery scheme, is not restricted to students who attend the course of instruction at the agricultural station, Ballyhaish. In fact, one or more creamery managers who have not been students at the course are usually among the candidates at each examination. A creamery manager, who, at the time of his examination, has managed a creamery to the satisfaction of the Department, is awarded, on his passing the examination, a special certificate known as "the creamery manager's certificate" in addition to the ordinary certificate which is granted to the other successful candidates. The latter are granted the creamery manager's certificate as soon as they have managed satisfactorily a creamery for at least one whole season. Some of the best students who attend the course are subsequently given facilities for learning the practice of creamery management in Irish creameries selected by the Department as suitable for the purpose. These students receive maintenance allowances at the rate of 10s. per week while stationed at the creamery in addition to free instruction. The Department also offer similar facilities for learning the business of a dairymaid at creameries to some of the pupils of the Munster Institute, Cork, and the Ulster Dairy School, Cookstown, county Tyrone.

The following table gives the number of creamery certificates awarded and the number of pupils trained at creameries during the year 1910 :—

Examination for Certificates			Practical training at Creameries.	
Date of Examination	Number of Candidates	Number of Pass Certificates Awarded	Pupil Creamery Managers	Pupil Dairymaids
2nd and 3rd March, 1910.	19	9	4	7

#### 4. Experiments and Investigations.

(a.) The experiment relating to winter dairying at the Centenary company's creamery in the county Tipperary was continued during the winter of 1909-10. The Department guaranteed the company against any loss which might be incurred by them in paying their suppliers at the following rates, fixed by mutual agreement:—A minimum price of 5d. per gallon during the months of December, January and February, and 4½d. during the month of March. A small profit accrued to the company after paying the prices referred to, so that the Department were not called upon to make good any loss this year. The payment of these prices, however, has not, so far, had the anticipated result of inducing the company's suppliers, as a whole, to take up winter dairying, although there has been some increase in the winter production of milk. In the circumstances, the Department do not consider that the experiment, can be regarded as conclusive. The results, however, justify another experiment on somewhat modified lines at one or two creameries,

(b.) The experiments to determine the effect on butter of the use of various brands of salt and the value of the use of a preservative in quantities approximating 5 per cent. and 25 per cent. with and without salt were continued during the year 1910. The results so far indicate (1). That contrary to the opinion held by many, salt, or the impurities usually found in salt, do not cause the defect in the flavour of butter known as "fishiness," but (2) that butter salted with some brands of salt does not keep so well as butter from the same churning preserved with other brands. Further investigation into the matter is, however, desirable before expressing any definite conclusions as to the merits of the different brands of salt.

(c.) The Department during the year 1910 made arrangements of a tentative nature to supply creamery proprietors and managers with detailed particulars of the costs of manufacture and prices received for butter monthly at a number of creameries. The system adopted was as follows:—The proprietors and managers of several of the creameries visited by the Department's instructors agreed to furnish each month to the Department the particulars in question in respect of their own creameries. The figures thus collected were tabulated by the Department and, with the omission of the names of the contributing creameries, were issued to each of these creameries. The information has been much appreciated by those to whom it has been furnished, as supplying a means of comparing in detail costs and prices, and so ascertaining in what particular respects greater economy or better results might be expected in their own creamery.

(d.) The investigation into the Reichert-Wollny standard and its application to Irish butter was brought to a conclusion this year. A detailed report of the results has been published in the Department's JOURNAL, Vol. X., No. 3. and a short summary is printed on page 261 of the Appendices. The result of the investigation indicates that the occurrence of a low Reichert-Wollny number in a sample of Irish butter does not, in itself, justify the

conclusion that the butter is adulterated. The Department, acting on the recommendation of the Departmental Committee on the Irish Butter Industry, intend to communicate with the local authorities in Great Britain with a view to co-operating by inspection of the premises in any cases where Irish butter is suspected.

#### 5. *Departmental Committee on the Irish Butter Industry.*

The Report of this Committee, which is referred to in a preceding paragraph, contains several recommendations which relate directly to the operations of the Department's creamery scheme. These recommendations are receiving careful attention and some of them will be given effect to in the scheme as revised for the year 1911.

#### 6. *Cow-testing Associations.*

The Department have constantly advocated the establishment of these associations as a means of improving the average milk yield of Irish cows. As in the case of most innovations the initial difficulties are considerable. In order, therefore, to encourage a commencement the Department have decided to make a grant at the rate of 1d. per cow per month towards the cost of testing, in the case of a limited number of associations established in accordance with the conditions prescribed in clauses 9 and 10 of the Department's scheme (No. 20) for improvement in the dairy cattle of Ireland. One such association is already in operation, and the Department hope that several additional associations will be started in 1911.

With a view to ascertaining whether a profitable dead meat trade could be carried on between suitable districts  
**DEAD MEAT TRADE.** in Ireland and London, trials of slaughtering and marketing according to the requirements of the Smithfield market were made at Enniscorthy, county Wexford, and Strabane, county Tyrone. Butchers experienced in the dead meat trade at Aberdeen, the chief source of supply to the London market, were employed for the work. Two small lots of cattle were dealt with separately at each centre. The average net return per cwt., live weight, on the several lots varied from 34/6 to 41/-. The trials were conducted by local feeders with the aid of grants from the Department towards the wages of the expert butchers employed and certain incidental expenses.

The Department arranged for a deputation representing Irish feeders in the most promising districts to visit Aberdeen and its neighbourhood to investigate the manner in which cattle are prepared and the trade conducted in that district. The members of the deputation came to the conclusion that the trade was one which could be carried on successfully in certain districts in Ireland, provided the requirements of the London market were carefully studied and fully met. A report of the proceedings of the deputation and on the results of the trials at Enniscorthy and Strabane appeared in the *JOURNAL* of the Department for April, 1910. The question of establishing the trade in Ireland was also discussed at length at the meeting of the Council of Agriculture in May,

1910. A report of the discussion was published in the JOURNAL of the Department for July, 1910.

In county Wexford a company has been formed to carry on a regular dead meat trade with London, and in county Louth a special committee of the Louth and Meath Farmers' Association are embarking on a similar undertaking. In each case the Department propose, with the concurrence of the county committee of agriculture, to make grants towards the expenses of the first year's work, including the cost of employing an expert butcher and an instructor to supervise the selection and feeding of stock by the farmers interested. Arrangements have been made for the provision of suitable abattoirs at Wexford and Drogheda, both of these centres having special facilities for the transit of the meat to London.

In county Down, a trial of marketing of meat, such as was made in 1909-10 at Enniscorthy and Strabane, is being arranged. The animals will be fed in the Banbridge district and slaughtered in Belfast. A similar trial will probably be undertaken in county Cork.

During the year 1909-10 an increased use was made of the Department's seed testing station, both by farmers and by seed merchants, as the following comparison will show.

Year.	Number of samples tested.	
	Farmers.	Seed Merchants.
1908-09.	1,038	157
1909-10.	1,051	190

In addition to the above, 710 samples were tested for the Department of Agriculture and their officials; 507 of these being samples taken under the Weeds and Agricultural Seeds Act, 1903.

The following table shows the counties from which the 1,444 samples (with the exception of those taken under the Act), were received, with the number sent from each:—

County	No. of Samples Received.	County	No. of Samples Received.
Antrim	75	Limerick	23
Armagh	9	Londonderry	104
Carlow	76	Longford	6
Cavan	54	Louth	82
Clare	5	Mayo	12
Cork	258	Meath	33
Donegal	27	Monaghan	11
Down	85	Queen's Co.	27
Dublin	146	Roscommon	3
Fermanagh	1	Sligo	0
Galway	7	Tipperary	19
Kerry	35	Tyrone	22
Kildare	20	Waterford	61
Kilkenny	31	Westmeath	0
King's Co.	22	Wexford	130
Leitrim	0	Wicklow	14

The accompanying table is a summary of the results of the tests for purity and germination of the various kinds of seeds examined during the year:—

Name of Seed.	No. of Samples.	Purity.			Germination.		
		Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
Wheat . . . . .	25	99	94.6	96.6	100	17	83
Oats . . . . .	118	100	100	100	99	10	82
Barley . . . . .	86	100	100	100	100	70	92
Rye . . . . .	8	100	93.4	96.3	98	15	69
Perennial Rye . . . . .	184	100	99.7	99.9	92	10	77
Italian Rye . . . . .	161	100	77.1	87.5	92	30	68
Meadow Fescue . . . . .	36	100	86.7	93.2	85	5	73
Meadow Fescue . . . . .	22	97.4	85.4	90	92	9	59
Tussock . . . . .	47	99.7	88	96.8	98	41	81
Cocksfoot . . . . .	49	99.6	85.4	94.4	99	40	65
Crested Dogstail . . . . .	4	100	90.1	95.7	89	71	78
Hard Fescue . . . . .	3	96.9	88.5	90.2	63	3	34
Tall Fescue . . . . .	2	87.5	67.5	77.5	84	64	74
Sheep Fescue . . . . .	1	100	100	100	60	60	60
Red Clover . . . . .	137	99.4	78.4	94.5	96	33 & 4h	86 & 1h
White Clover . . . . .	50	99.4	73.6	95.1	31 & 4h	4 & 3h	90
Alfalfa Clover . . . . .	61	99.3	84.9	96.1	99	14 & 4h	83 & 7h
Trifolium . . . . .	2	99.3	85.3	97.4	86	69 & 2h	66
Lucerne . . . . .	2	99.6	96.7	96.3	84 & 7h	70 & 2h	80 & 14h
Swede . . . . .	75	99	100	100	98	38	83
Rape . . . . .	2	100	100	100	99	94	96
Cabbage . . . . .	8	100	100	100	97	82	96
Marcel . . . . .	68	100.0	99	100	171	24	102
Carrot . . . . .	2	95.0	95.0	95.0	75	70	72
Turnip . . . . .	2	98.0	94.6	96.8	99	38	43
Flax . . . . .	271	100	79.2	93.2	99	13	94
Vegetable . . . . .	3	100	100	100	93	35	57
Tobacco . . . . .	15	—	—	—	90	25	59

**Wheat:**—The germination in the majority of the samples tested was very satisfactory, but 20 per cent. of them were decidedly inferior in this respect.

**Oats:**—About half of the samples tested were good, many of the remainder, however, left very much to be desired, the germination in some cases being as low as 21 per cent., 15 per cent., 11 per cent., and 10 per cent.

**Barley:**—Most of the samples tested were very good, the average germination being 13 per cent. higher than in the previous year.

**Rye:**—A few samples only were tested, half of which were decidedly unsatisfactory. The average germination, however, was 1 per cent. higher than in 1908-9.

**Perennial Rye:**—Both as regards purity and germination the samples of this seed showed a slightly higher figure than last year. Nevertheless, that there is still room for considerable improvement in the quality of this seed is indicated by the fact that percentages of purity as low as 81 per cent., 77.9 per cent., 75 per cent., and 59.7 per cent., and of germination as low as 41 per cent., 25 per cent., 23 per cent., and 13 per cent. were found.

**Italian Rye:**—As regards purity there was an improvement over last year's samples averaging 5 per cent., but the germination was in a very large number of cases far from satisfactory. This is doubtless partially to be explained by the adverse weather

conditions under which the crop of this seed was harvested in 1909.

*Meadow Fescue*:—There was a slight increase in the average per cent. of purity in this case as compared with the previous year. The average per cent. of germination also showed a decided improvement, but still a considerable number of distinctly unsatisfactory samples were received.

*Meadow Foxtail*:—As is unfortunately too frequently the case with this seed the percentage of germination was very unsatisfactory, only two samples reaching 60 per cent. and over, the higher of these being but 62 per cent. The purity of the samples left on the whole little to be desired.

*Timothy*:—Purity and germination were, on the whole, quite satisfactory, only two inferior samples being received.

*Cocksfoot*:—Only five of the samples tested germinated above 85 per cent., showing that in a large proportion of cases the germination of this seed was not good. The purity was satisfactory, with the exception of two samples, which showed a percentage of purity of only 75.5 per cent. and 68.8 per cent., respectively.

*Crested Dogtail*:—Both as regards purity and germination the samples of this seed were on the whole satisfactory.

*Red Clover and Cow-grass*:—The average percentage of germination was 4 per cent. higher than in the previous year, whereas the purity showed little difference. The percentage of samples containing the seeds of Dodder was 22 per cent., as compared with 13 per cent. in the previous year.

*White Clover*:—Seeing that only one of the samples received germinated over 90 per cent. it is clear that much of the White Clover Seed used during the year was of very inferior quality. In many instances the proportion of "hard" seeds was higher than is usually the case in good samples. As regards purity, however, the samples were found to be generally satisfactory.

*Alsike Clover*:—As compared with those of White Clover the samples of this seed were considerably more satisfactory in their germination, and the purity also was better.

*Trefoil*:—The purity of the samples was quite satisfactory but the germination of the majority of the comparatively few received for testing left much to be desired.

*Swede, Turnip, Rape*:—As is usual with these seeds the purity was quite satisfactory. As regards germination only six of the samples tested were decidedly bad, the remainder being, on the whole, good.

*Mangel*:—The results of the germination tests of this seed showed that very much of it was of poor quality, only about one-third of the number of samples showing a germination of over 100 per cent. As with Italian Rye Grass so here; this inferiority is largely to be explained by the unfavourable season experienced in 1909.

*Flax*:—One-half of the number of samples tested showed a germination of 90 per cent. and over, seven samples were distinctly bad in germination, reaching only 61 per cent., 60 per cent., 56 per cent., 45 per cent., 32 per cent., 17 per cent., and 13 per cent., of

the remainder about one-half of the samples were not of a satisfactory standard of germination. The purity was in general satisfactory.

**Cabbage:**—The comparatively few samples tested were, on the whole, satisfactory.

**Carrot and Parsnip:**—The two samples tested of the former were satisfactory, while the two of the latter germinated 59 per cent. and 48 per cent., respectively.

**Vetches:**—Only three samples were tested, two of which were distinctly inferior, germinating only 44 per cent. and 35 per cent., respectively.

Of the several hundred samples of copper sulphate examined all were found, as in 1909, to be up to the standard of purity required for spraying purposes. The samples of washing soda examined were, with two exceptions, up to the same high standard of purity.

The exceptions referred to were samples submitted by farmers who had inadvertently been supplied by shopkeepers with wrong material.

The Department issued early in March last a Report of Proceedings under the Fertilisers and Feeding Stuffs Act, 1906, for the year 1908-9. This report contained much information of interest to manufacturers and users of artificial manures and feeding stuffs and was widely circulated. A similar report in respect of the year 1909-10 will be issued early in 1911. It will not, therefore, be necessary in the present report to do more than allude to the outstanding features of the work carried out by the Department under this Act.

Early in the present year the Department availed themselves of their powers under Section 4 (c) of the Act to make regulations as to the manner in which the analyses of samples taken under the Act are to be performed.

These Regulations, collated with the Regulations previously made by the Department under Section 4 (a) (b) and (c), were issued in one publication entitled the Fertilisers and Feeding Stuffs (Ireland) Regulations, 1910. Copies of the latter Regulations may be obtained free on application to the Department.

Following on the resignation of Sir Edward Thorpe, Principal Chemist of the Government Laboratory, who had hitherto filled the position, the Department, on the 1st April, 1910, appointed Mr. David S. Jardin, F.I.C., F.C.S., to be Chief Agricultural Analyst for Ireland under the Act.

During the year under review 441 samples of fertilisers and 291 samples of feeding stuffs were officially taken under the Act, and of these 268 samples of fertilisers and 171 samples of feeding stuffs were submitted to analysis. Two of the Department's officers were specially employed during the spring in investigating the state of the trade in Ireland in these commodities. The shops and stores of traders engaged in this business were visited, and



samples taken where considered necessary. Much useful information as to the condition of the trade was thereby obtained.

Proceedings were instituted by the Department in two instances, under Section 6 against vendors for failure to give the prescribed invoice in connection with the sale of fertilisers. Convictions were obtained and a fine imposed in each case.

In the Report of Proceedings under the Act details will be given of two interesting experiments carried out by the Department during the year. One of these was undertaken to test the value as a calf-food of a very highly-priced "Milk Substitute" as compared with a meal prepared in accordance with the directions given in the Department's Leaflet No. 54. The other experiment was conducted by one of the agricultural instructors with a view to testing the comparative values of a low-grade imported compound manure and a manure mixture of equal cost obtained locally.

Copies of the Report in question, when published, may be procured from Messrs. E. Ponsonby, Ltd., Government Sale Agents, 116 Grafton Street, Dublin.

*American Gooseberry Mildew and Black Currant Mite (Ireland)*  
*Order, 1908.*

Arrangements were made, as in previous years, for the work of inspecting gardens and reporting on cases of  
DESTRUCTIVE INSECTS AND PESTS American Gooseberry Mildew and Black Currant Mite. The Department are glad to report  
ACTS, 1877 AND 1907 a substantial decrease in the number of outbreaks reported during the year, the figures being 211 cases of mildew and 32 cases of mite, as against 540 and 393 cases, respectively, last season. The usual notices, requiring amongst other measures, the immediate destruction of the affected bushes, were at once served on the occupiers of the premises on which the diseased bushes were found. With very few exceptions the requirements of these notices were promptly complied with. In all about 80,000 affected bushes were destroyed without compensation. It may be mentioned that on their annual inspection of the principal nurseries, the Department's officers were for the first time able to certify the entire freedom from these diseases of all the stocks examined.

Several applications were received during the year for licences under Article 5 of the Order to import gooseberry bushes into Ireland. In one instance the necessary licence for this purpose was granted, the Department having satisfied themselves that the small quantity of the particular variety which it was desired to obtain for experimental purposes could not be procured in this country. The bushes in question were examined by one of the Department's officers immediately on their being landed, and were found to be clean and free from disease.

A number of experiments were again conducted this year with a view to testing the efficacy of different fungicides. Spraying with potassium sulphide accompanied by severe pruning was found moderately efficient as a preventive measure. Once the

disease had made it appearance, however, this treatment was found to be practically useless, and, so far, the only certain method of eradicating the disease appears to consist in the immediate destruction of all affected bushes.

*Black Scab in Potatoes (Ireland) Order, 1908.*

Reference was made in last year's report to the fact that three small outbreaks of black scab had been discovered in October, 1908, in a certain district of county Down. The Department in consequence arranged last autumn for a thorough inspection of the potato crops in that and the surrounding districts, and an officer of the Department was constantly employed during the digging season in examining the tubers before pitting. Four outbreaks, each fortunately of small extent, were reported by him. These all occurred in the district in which the disease had previously been found, and, so far as the Department can ascertain from close inquiry, the disease appears to be confined exclusively to this locality. In each case the diseased tubers, which were very few in number, together with the haulms, were at once destroyed, and the remainder of the crops disposed of to the Department's satisfaction. The growers in these cases were prohibited from again planting potatoes on the land without the express sanction of the Department.

Some alterations were made last year in the Regulations governing the importation into Malta of potatoes grown in Ireland. In the previous year, the Government of Malta required that every consignment of potatoes shipped to Malta from this country should be accompanied by a certificate from an officer of the Department showing (1) that the potatoes in question were free from black scab, and (2) that they had not been grown on land which was infected with that disease. Under the revised Regulations issued in September, 1909, actual inspection of the potatoes by an officer of the Department is no longer necessary. Every consignment of potatoes shipped to Malta from Ireland must, however, be accompanied by a certificate from the Department to the effect that, so far as they are aware or can ascertain, black scab does not exist in the county in which the potatoes were grown. With this must be sent a statutory declaration from the shipper to the effect that the potatoes were grown in the county in question. The Department arranged for the issue of the necessary certificates, and shipments of Irish seed potatoes to the extent of 8,800 tons were made during the season to Malta from the North of Ireland.

This Act came into operation on the 1st of January, 1910. In December, 1909, the Department addressed a communication to each county council bringing under their notice the provisions of Part I. of the Act. It was pointed out that in order to put this Part of the Act into force in any county it is necessary for the county council to express their consent to the making by the Department of an Order under Section 1, declaring certain plants to be

WEEDS AND  
AGRICULTURAL  
SEEDS (IRELAND)  
ACT, 1909.

noxious weeds throughout the county. The councils of sixteen counties formally signified their consent, and Noxious Weeds Orders were made by the Department in respect of these counties. The necessary work of inspection was undertaken by the Department, who during the season assigned eighteen officers specially for this work. Reports as to prevalence of weeds on lands, roads, etc., were received in 2,468 cases. On consideration of these reports notices were in 2,169 cases served by the Department on the occupiers requiring them to destroy the noxious weeds growing on their lands. Little difficulty was experienced in prevailing on occupiers to comply with the requirements of the notices, and in 2,038 cases (or 94 per cent) the Department's officers found on their second and subsequent inspections that the weeds had been duly cut or otherwise destroyed as directed. Suitable action was taken by the Department in those cases in which the requirements of the notices were not complied with.

The following table shows the counties which have adopted the Act, the plants declared to be noxious weeds, the number of reports received and the number of notices served and complied with in each of these counties:—

County.	Plants declared to be Noxious.	Number of cases reported.	Number of Notices.	
			Served.	Complied with.
Antrim, . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.	138	127	120
Armagh, . .	Ragwort, Thistle, Dock.	127	124	117
Down, . .	Charlock, Coltsfoot, Thistle, Dock.	57	54	52
Dublin, . .	Ragwort, Coltsfoot, Thistle, Dock.	128	117	112
Fermanagh, .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.	80	67	66
Kerry, . .	Do.	307	234	204
Kildare, . .	Ragwort, Coltsfoot, Thistle, Dock.	166	156	149
Kilkenny, . .	Thistle.	133	119	107
Limerick, . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.	171	152	145
Londonderry, .	Thistle, Dock.	180	162	139
Meath, . .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.	265	243	227
Monaghan, . .	Do.	67	63	58
Queen's, . .	Ragwort, Coltsfoot, Thistle, Dock.	165	134	124
Roscommon, .	Ragwort, Charlock, Coltsfoot, Thistle, Dock.	91	86	85
Tipperary, S.R.	Do.	271	227	220
Westmeath, . .	Do.	113	104	100
	Total, . . . .	2,468	2,169	2,038

By Section 5 of the Act the Department are empowered to cause samples of the various agricultural seeds offered for sale in this country to be taken and tested for purity and germination. During the year under review over 900 samples were so taken, of which about 500 were selected for testing.

The reports of the Department's Seed Testing Station on these samples show that a large proportion of the seeds sampled were of very inferior quality, many of them being quite worthless for sowing purposes. The Department are communicating on the subject with the vendors of such seeds. If an improvement is not manifested next season in the quality of the seeds sold by these persons the Department will be constrained to exercise their powers under Section 6 of the Act by publishing the results of the testing of low-class seeds.

An examination for forestry apprentices was held in September, 1909. The prospectus of this examination will be found in the Appendices, page 199.

#### FORESTRY.

Six applicants were selected for training and assigned to the Department's forestry station, Dundrum, county Tipperary, for the first year's course. The six first year apprentices who had been working at Dundrum during the session, 1908-9, were transferred to the forestry station, Avondale, county Wicklow, to continue their course in the second year, and two of the four apprentices following the second year's course at Avondale were retained for a third year. There were, accordingly, fourteen forestry apprentices in training during the session, 1909-10. One of the second year apprentices, however, left before the end of the session. One of the third year apprentices obtained a scholarship in forestry, tenable at the Royal College of Science, and the other has been given employment as an assistant at the Department's woods at Camolin.

Of the eighteen apprentices who have already completed the three years' course of training at Avondale station, ten are at present employed in connection with the Department's forestry operations, four are employed at forestry work on private estates, and two are holders of scholarships at the Royal College of science, where they are taking out a higher course in forestry.

The fitting up of the out-buildings at Avondale for the purposes of a forestry museum was completed, and a collection of sawn planks and other specimens obtained from various sources.

Reference was made in the last Report to the financial provision made by Parliament to enable the Department to acquire under the Irish Land Acts suitable areas of woodlands and lands adapted for forestry. Operations are now being carried out at the following four centres in connection with this vote:—

Centre	Area acres.
Dundrum, Co. Tipperary, ...	1,196
Camolin, Co. Wexford, ...	646
Aghrane, Co. Galway, ...	1,277
Bailieboro', Co. Cavan, ...	405

The Avondale station, including Ballyfad woods, having a total area of 815 acres, is primarily intended for the education of foresters, and the cost of this centre is borne by the Department's Endowment.

During the winter, 1909-10, 25 acres were planted at Dundrum, 50 acres at Camolin, 45 acres at Aghrane, and 12 acres at Avondale. The property at Ballieborough was not acquired until the conclusion of the planting season. Fencing and other preliminary work was undertaken, and planting at this centre is now in progress. The area to be planted at the other centres in 1910-11 extends to 140 acres.

At Dundrum centre, where there is a large quantity of mature timber, the saw-mill was at work during the year. Most of the sawn timber was sold locally.

An application from the Department for a grant for forestry in Ireland is at present being considered by the Development Commissioners.

Negotiations are in progress with the Estates Commissioners for the purchase of further suitable areas, and the Department expect before the end of 1910 to be put in possession of a wood of 250 acres in county Londonderry. Arrangements for taking over an area of 470 acres in county Tyrone, and of 2,000 acres in Queen's county are also approaching completion.

County forestry schemes are working in Kildare and Wexmouth, and the county council of Waterford have also decided to adopt a scheme, and to strike a rate of 1d. in the pound for this purpose. As a result of a circular letter issued by the Department in April, 1910 (printed in the Appendices, page 201), to each county council, several other councils have had under discussion the possibility of promoting county schemes of forestry.

The Land Act of 1909 contains a provision by which purchasers of holdings become liable to a penalty if they fell without the consent of the Department any tree necessary for the shelter or ornament of their holdings. Four applications have been received from occupiers for permission to cut down trees on their farms, and the Department, on inquiry into the circumstances, have found themselves warranted in issuing the necessary consent in each of these cases.

As will be observed from the Department's circular letter to county councils, already referred to, the co-operation of these bodies has been solicited in preventing the unnecessary felling of trees by peasant proprietors.

The services of the Department's Forestry Expert were availed of during the year by private owners and public bodies requiring advice on the carrying out of planting operations on a large scale. Trained working foresters, employed in the Department's woods, were lent during the planting season, whenever their services could be spared, their wages being paid by the persons employing them.

Expert advice on points connected with forestry was given by letter, and the leaflets published by the Department on the selection of trees, methods of planting, etc., were largely availed of by persons requiring general information on the subject.

A series of articles on the "Protection of Woodlands in Ireland," which has appeared in the Department's JOURNAL, is being incorporated in a "Handbook on Irish Forestry," which is about to be published by the Department.

Ninety-seven applications in connection with this scheme received consideration during the past year, and sixty-three loans, amounting to £1,175, were granted. Ten of the applications were withdrawn or cancelled for various reasons, and twenty-four cases had not been finally dealt with on 30th September, 1910, pending the result of the usual inquiries or the completion of the necessary documents. In addition to the work involved in connection with loans approved in the year under review, the Department's operations under this scheme included the completion of fences, for the erection of which loans were sanctioned in previous years.

Thirty loans for the purchase of "hand separators" were granted during the year under review, involving an expenditure of £247. Nineteen were granted to applicants from county Cork, six from county Limerick, and five from county Kerry.

Under the provisions of this scheme the Department granted eleven loans amounting to £96 during the past year. In all cases the applicants agreed to hire the machines to small farmers in their districts at a fee to be fixed by the county committees and approved by the Department.

In addition to the operations under this scheme the Longford, Mayo and Tyrone county committees decided, with the consent of the Department, to purchase a number of knapsack sprayers for the purpose of hiring out to small farmers in the poorer districts at a nominal fee. The cost of the fifty-five knapsack sprayers procured under this arrangement was borne by the joint fund at the disposal of the county committees.

Three applications for loans in respect of meal mills were received during the past year. On investigation it was found, however, that none of the applications came within the scope of the scheme, and no loan was sanctioned in any of these cases.

Loans amounting to £800 were duly advanced in the case of the two approved applications referred to in last year's report. An additional sum of £60 was also lent in the case of a Village Hall, in respect of which a loan had been granted in a previous year. Two further applications have been approved, but the amount of the loan has not yet been advanced in either case.

## 2. TECHNICAL INSTRUCTION.

This section of the Report covers the period of the Academic Year, 1st August, 1909, to 31st July, 1910.

Attention is drawn to the reports of the Inspectors of the Branch and to the Tables and Appendices, in which will be found a full detailed account of the work of the Branch. It is only necessary to deal with some points of outstanding interest.

There is still much misapprehension as to the source of the Department's funds for technical education and the source of funds, source from which its grants to Secondary Schools are made. It may be desirable, therefore, to point out that the whole of the Department's Endowment for technical education, viz.: £55,000 per annum provided under the Act, is devoted to technical education, and that no part of it is expended in grants to Secondary Schools. The grants made by the Department to Secondary Schools are provided out of the moneys voted annually by Parliament. There is a further vote for grants to technical schools. It may be pointed out that these grants are carefully controlled by conditions which secure educational and administrative efficiency, and they have had the effect of greatly raising the character of the instruction both in Secondary and Technical Schools.

The various schemes of technical education under Local Authorities throughout Ireland are, on the whole, doing excellent work. They are revised annually in accordance with the experience gained. Nearly all the Local Authorities are now spending the whole of their available income, and in many cases their operations are very materially restricted by want of means. In a number of Urban Centres the provision of permanent buildings has proved unavoidable, and loans have been raised for the purpose of providing new buildings, the repayment of which falls upon the annual income, already too small for the maintenance of the school. Under these circumstances there is little opportunity for extension even on lines which have been shown to yield excellent results.

The Department regret to have to record one marked exception to the increasingly successful work in progress in the country. The Department have had reason to express grave dissatisfaction with the administration of the scheme of technical instruction for the City of Dublin. They have always laid down as a condition, precedent to their approval of a scheme of technical instruction for the County Borough, that the direction of the work should be placed in the hands of a Principal, who should have had the requisite training and educational experience for such a responsible duty. However necessary such provision was when the work of the Committee was entirely carried on in the school building in Kevin Street, it became imperative when the Department added the annual contribution of over £9,200 to the funds of the

Committee. They allowed the erection of a new school in Bolton Street to go forward without prejudice to this question on the condition that an Educational Expert should be appointed to direct the work, and this was done. Now that the school is approaching completion it is essential that the administration of the scheme shall be so organised as to ensure that success which inevitably follows efficient organisation. Accordingly, the Department in March last forwarded the following letter to the Committee:—

No. 32787-10.

30th March, 1910

Sir,

Before taking into consideration the scheme of Technical Instruction for the County Borough of Dublin for the Session 1910-11, for which the approval of the Department will be needed, the Department desire to invite the attention of your Committee to certain very serious matters connected with the working of the Technical Schools. The Department have had under review the reports of their Inspectors upon the schools and have also had before them the last report of the Auditor of the Local Government Board in his audit of the accounts of the Committee, with which the Department have been recently supplied.

The preparation of a scheme for 1910-11 affords a natural opportunity for a consideration of the matters to which the attention of the Committee is invited. Moreover, in the Department's view, it is requisite that such an inquiry should be made into the affairs of the Schools before any further developments can be sanctioned. The scheme for 1910-11 will differ from preceding ones in that it must involve a considerable extension of the Committee's operations consequent upon the opening of the new premises in Bolton Street. The School in Bolton Street is now nearing completion, and so far no scheme or report has been submitted to the Department concerning the subjects to be taught in the school, concerning the plant and equipment to be provided, and concerning the teachers to be appointed and their respective duties. It is obvious that if these matters are to be dealt with in a proper and businesslike manner they should have been already gone into most carefully, and proposals put before the Department for sanction. That this course has not yet been taken, that the risk of delay or of hastily and imperfectly conceived work has been incurred with reference to this new and most important stage of the scheme of Technical Instruction for the City of Dublin, would seem unfortunately to be only of a piece with the regrettable state of affairs which for some time past appears to have been prevailing in the administration of the scheme. The Department earnestly ask the Committee, on the occasion of this new departure, to make an effort to remedy the defects which have been appearing, and to launch the new work under conditions which will give a reasonable promise of success instead of under conditions which amount to a guarantee of certain failure. The interests of the citizens and of their children, for whose benefit this scheme of Technical Instruction is intended, are so vitally involved in this question that it is confidently hoped that the Committee will awake to the need of thoroughgoing and earnest action. The Department now give notice at this early period that unless reforms are effected in the matters to be presently referred to they will not be prepared to sanction a scheme for the Session 1910-11.

### I.

The first reform that is necessary is that the whole scheme, with the inclusion of the new provision for the Bolton Street school, be placed effectively under the administration of an expert director. It is more than four years now since an educational expert was appointed by the Technical Instruction Committee. The Department think it well to recall what took place in regard to that matter.



The facts were communicated to the Municipal Council in a letter to the City Treasurer dated 24th March, 1906. In that letter the Department announced that

"for some time past they had reviewed with anxiety the protracted and unnecessary delay which had so long deprived the City of Dublin of the benefits which the Act of 1899 was intended to confer and of which every other urban centre of any importance in Ireland had been taking the fullest advantage for several years."

It was then pointed out that in December, 1903, after protracted negotiations, the Department had intimated their approval of proposals submitted by the Committee subject to certain specific recommendations, of which the most essential was the appointment of a director with special scientific or technological experience, who would be immediately responsible to the Technical Education Committee for the general working of the City scheme. The Committee at first refused to consider this appointment on the ground that they had in the person of their Secretary a capable officer to undertake the duty—a view of the qualifications of the Secretary which the Department were unable to take. At length, at the end of July, 1904, the Committee expressed their willingness to engage the services of an expert to consult with them and advise as to the best manner of erecting schools suitable for the scheme adopted by them, and although this proposal did not fulfil the condition indicated by the Department as necessary to the true efficiency of the scheme they nevertheless, in the hope of getting some advance made with the work, accepted it as a partial solution of the difficulty. Accordingly on the 26th April, 1905, Mr. John Ryan, M.A., D.Sc., Principal of the Paddington Technical Institute, was appointed by the Committee. In their letter to the City Treasurer on the 24th March, 1906, the Department said:—

"The question has now reached the stage when a site for the schools at the north side of the City has at length been selected and approved, and when no reasonable material difficulty need prevent the Committee from proceeding at once with the work of organising a comprehensive scheme and co-ordinating its various elements with each other and with the general educational work in the City under the direction of the educational expert who is now in their service."

Four years have passed since that letter was written, during which the Department have extended to the Committee a large measure of freedom in the administration of the scheme. They regret to observe that the exercise of this freedom has not led to the results for which they had hoped; and that now, when the Bolton Street school is nearing completion, no adequate progress has been made towards the organisation of the comprehensive scheme referred to, or towards provision for the proper management of the school. Indeed, although the qualified educational expert has been almost five years in their service, and although they have been paying him a suitable salary, the Committee, for some reason, have by no means fully availed themselves of his assistance. On the other hand, while the Committee have thus neglected to utilise to advantage the abilities and experience of the qualified expert, they have permitted the Secretary of the Committee to assume duties for which the Department had declared him not to be qualified. The Secretary has assumed the title of "Principal" as well as that of "Secretary and Manager," though it is abundantly evident that the duties attaching to such an office have not been, as in the Department's view they could not be, adequately performed by him. For the last five years Inspectors' reports of an important nature have been issued to the Committee, but it would appear that the recommendations made in them have in most cases neither been acted upon nor even considered. Again and again on the visits of Inspectors the Secretary is not to be found on the premises at Kevin Street. During the present Session one Inspector reports that out of five visits paid in the evening he found the Secretary present only on one occasion. Nor does it appear that he is engaged at the other centres, such as Rutland Square or Chatham Row. Indeed it is clear that the Secretary has not made any serious attempt to discharge the duties of the additional

office he has assumed, while the fact of his assuming them must have of itself, and it manifestly has, involved limiting the utility to the Committee of the expert adviser, who, in such anomalous circumstances, could not possibly give them the full benefit of his assistance. The Department are aware that the Committee have recently made an arrangement allocating the superintendence of the educational work of the scheme to Dr. Ryan, but they have given him no proper authority or control in the matter, and without full authority and control in the educational expert's hands such an arrangement is doomed to ineffectiveness and could not meet the needs of the case. The Department feel assured that the Committee themselves must be very conscious of this state of things. No scheme could succeed under such conditions.

The manner in which the Secretary discharges the duties properly belonging to his legitimate office will be referred to presently.

On a consideration of those circumstances the Department, now that the fortunes of the school in Bolton Street are about to be vitally affected by the methods of administration, feel it their bounden duty to revert to their original recommendation and to insist as a condition precedent to their approval of the scheme for 1910-11, that the work of direction and organisation of the scheme as a whole be placed in the hands of a qualified Director. Such a condition is essential to the efficiency of any important scheme of technical instruction. It is doubly essential in the case of the Dublin scheme in its present stage, for which in short it has now become the sole protection against disastrous and discreditable failure. The Department, therefore, request the Committee to place the whole scheme for the City of Dublin under an educational expert with the full authority and responsibility of a Director responsible directly to the Committee and having control of the entire staff, administrative and educational, employed under the scheme. They will be prepared to approve for this purpose either Dr. Ryan, who is now in the Committee's service, or, if the Committee prefer it, any other technological expert possessing the requisite qualifications.

## II.

The second reform necessary in the administration of the scheme has reference to the manner in which the Secretary discharges the duties properly belonging to his office. The Report to the Municipal Council of the Auditor of the Local Government Board dated 26th January, of this year, which has recently been submitted to the Department, reveals, with official confirmation, a state of negligence and irregularity in the Secretary's department, which is of the utmost gravity. The Auditor calls particular attention to the report of Mr. John Good, who investigated these irregularities, and to the report of the sub-committee, to whom Mr. Good's report was referred. He points out that the Secretary, contrary to his duty, withheld all information concerning these two reports from the Municipal Council, and he intimates at a later stage it may be necessary to consider further the effect of this action. The sub-committee in their report signed by the Rev. T. A. Finlay, stated their opinion

"that grave irregularities had occurred, that the failure to lodge at the proper time, regarding which no explanation was offered, was in many ways reprehensible."

They added that they

"held strongly that if the Technical Instruction Committee are to fulfil adequately their duty to the citizens, and to save themselves from adverse criticism, steps should be promptly taken to put the administrative and educational departments of the Technical Schools on a satisfactory basis."

They recommended that the services of two clerks in the Secretary's office, Messrs. Henly and Dillon, be dispensed with, and that

"Mr. O'Carroll be informed that there had been great carelessness and want of supervision in those departments under his control which came under our observation."

When this report came before the Technical Instruction Committee it appears a division was taken as to whether it should be adopted in full or without the latter portion (recommending dismissals, etc.) of which it was stated some members did not approve. The voting proved to be equal and the matter appears to have been dropped. Mr. Good thereupon resigned. The Auditor then refers to the manner in which the Secretary keeps the minutes of the Committee. He says:—

"In the first place the absence of any attempt at indexing entails much waste of time when reference to any particular minute is required. Again, when minutes are found, they are sometimes too vague to indicate definitely the orders of the Committee. When seeking the authority of the Committee for the appointments of the staff for the Session 1906-7 it appeared from the minutes that certain teachers, of whom a few were mentioned by name, had been called up and interviewed, but no result of such interview was recorded, no entry appeared that such and such persons were appointed on such and such terms. As a consequence the legality of the payments (of which there were some hundreds) appeared to be open to question, but as I had no doubt as to the intentions of the Committee I took the responsibility of passing the items, dealing with them as payments on foot of presumptive contracts, based on the forms of agreement adopted by the Committee (which forms, however, the Secretary omitted to get the staff to sign for, 1906-7), and on a list of names, class hours and remuneration, stated to be the same for the previous Session, being a copy of a list (Form A) sent to the Department. Apart from the question of proper authority, however, a number of the calculations appeared to be inconsistent and erroneous, and after a lengthy and laborious investigation, dealing with the matter on the most liberal principles, I disallowed seven small overpayments, amounting to £8 3s. 9d. This sum was lodged by the Secretary, on whose certificate the payments were made, and who ought to have seen that all the payments were calculated on the same principle to accordance with terms clearly authorised by a definite minute. In another instance payments, in excess of the amount authorised by the Council, were made on the certificates of the same officer amounting to £29 3s. 4d., and as this sum was not lodged, I surcharged against him as a loss or deficiency occasioned by his negligence. . . . In the accounts of the same Committee occurred a payment of £28 2s. 1d. to Mr. P. T. Healy, an officer of the Committee, who alleged that when in charge of cash he had overlodged to that extent. Having made as full inquiry into the matter as possible, both now and at the previous audit, I was unable to satisfy myself that it was a legal charge, or to regard it as other than an unfounded payment, and as such I accordingly disallowed it."

So much for the Auditor's report which has been submitted to the Department. To this statement should be added the Department's letter of the 14th instant complaining and giving particulars of the unsatisfactory mode of preparing the Committee's claim for the grants payable from the Treasury, from which it is evident that the Secretary's methods since the period dealt with by the Auditor's report show no improvement. But since that period, moreover, the Department have cognisance, through the ordinary channels of the public press, of subsequent developments of a very serious character. The Technical Instruction Committee being equally divided, failed to adopt the recommendation of the sub-committee to dismiss the two clerks, whose irregularities had been pointed out, or to censure the Secretary for his negligent supervision of them. The evils accordingly went on uncorrected, and one of the two clerks in question advanced from the practice of irregularity to the practice of fraud. He at length absconded, on the 16th November last, when it was found that for a considerable period he had been embezzling the funds of the Committee and falsifying documents. He was thereupon arrested, and he

was convicted at the Dublin Commission. He is now serving a sentence in jail.

The state of things above described not only should no longer be allowed to continue, but it is of such a nature that it constitutes a grave discredit to the Technical Instruction Committee. The Department must now request the Committee to take into their immediate consideration the whole question of the office arrangements in connection with the scheme. Were it not that the Committee themselves had failed in their duty in not repudiating the Secretary when recommended to do so by the sub-committee, and had thus left him without that necessary assistance to improve his methods, the Department would feel constrained to call into question the continuance of this officer's employment. They make, however, due allowance for this circumstance and they confine themselves to requesting in his case that Mr. O'Garraill be required to limit himself strictly to the duties properly attaching to the office of Secretary; that he be obliged to cease assuming, nominally or otherwise, the functions of Principal or Director, and that he be paid only such salary as has been expressly sanctioned by the Department as part of the approved expenditure under the scheme. One of the irregularities brought out by the report of the Local Government Board Auditor is that, notwithstanding the Department's refusal to sanction an increase above the maximum originally fixed, a salary of £100 in excess of this maximum has been paid to the Secretary. Furthermore it will be necessary, pending distinct and satisfactory evidence of improvement in the manner of discharging his business, to regard the tenure of his office for the time being as probationary.

When the Committee have thus regulated the position of the Secretary they should immediately proceed to overhaul the entire arrangements in the Secretary's office and lay down a well-considered system for the future management of the work.

I am,

Sir,

Your obedient Servant,

(Sgd.) T. P. Gna.  
Secretary.

The Chairman of  
The City of Dublin Technical Instruction Committee,  
Lower Kevin Street, Dublin.

The Department regret that the conditions laid down by them have not been satisfied, and that no scheme for the County Borough of Dublin has been submitted to them for the Session now in progress. Since under their statutory powers the funds for technical instruction can only be expended under the terms of a scheme approved by them, no part of their funds are available for the County Borough during the current session.

Full information was given in the last Annual Report as to the operations of the Branch, which it will be unnecessary to repeat here. In connection with the schemes under Local Authorities, however, a change of importance has been made in connection with the provision of Scholarships. Hitherto these Scholarships have been tenable in Secondary Schools. The Department have for a long time been aware that the object of these Scholarships, which was to prepare boys for an industrial career, had not been attained. The subject was brought up for discussion at the Board of Technical Instruction, and a Committee appointed to draft a revised scheme. This scheme has now been issued, and will replace the previously existing scheme of Scholarships for

Boys which had formed a part of some of the County Schemes. The Scholarships are now divided into two classes:—

- (1.) Technical Scholarships for Boys of 13 years and upwards who have completed their primary school course, and which are tenable at Day Trades Preparatory Schools or other schools which provided a course of the same type.
- (2.) Apprenticeship Scholarships for Boys who have attained the age of 16 years, and these are tenable throughout the term of indentured apprenticeship to approved trades.

The intention of these Scholarships is to secure picked boys from the primary school and, after a period spent in a school offering a course specially designed to prepare him for a trade, to provide a sum sufficient to maintain the boy throughout the whole period of his apprenticeship in a skilled trade. It is believed that this scheme will remedy the defect so often experienced where a boy who has received a good preliminary training is unable to follow it up by apprenticeship in a skilled trade for which his abilities fit him. It is hoped that it will become the object of pride with the apprentices themselves and with the Committees to see that firms come to regard the having a Scholarship apprentice with them as an advantage and even a distinction.

TABLE SHOWING THE OCCUPATIONS OF STUDENTS ATTENDING URBAN AND  
[—] COUNTY SCHOOLS AND CLASSES IN NON-AGRICULTURAL SUBJECTS.

	Lancaster.	Manchester.	Ulster.	Con-naught.	Total.
<b>YOUNG MEN.</b>					
Persons engaged in Farming Occupations.	588	536	689	523	2,336
Building Trades—including Workers in Wood, &c.	281	413	379	54	1,127
Coach and Car Builders.	27	15	19	4	65
Engineers, Workers in Metal, Draughtsmen, &c.	419	183	877	6	1,485
Architects, Surveyors, Civil Engineers, &c.	32	38	55	—	125
Electrical Engineers, Scientific Instrument Makers, &c.	90	57	111	1	259
Printing Trades—Compositors, Lithographers, &c.	162	48	81	12	243
Textile Industries—Designers, Weavers, &c.	48	11	489	11	559

## OCCUPATIONS OF STUDENTS—continued.

	Leinster.	Munster.	Ulster.	Con- naught.	Totals.
YOUNG MEN.—continued.					
Painters and Decorators. .	46	78	46	10	200
Plumbers, Gasfitters, &c. .	59	54	63	2	178
Trades involving applied Art —Jewellers, Furniture Makers, &c.	73	38	59	3	164
Chemists, Analysts, Drug- gists, &c.	85	63	120	1	269
Salesmen, Shopkeepers, Ware- housemen, &c.	310	387	645	54	1,346
Clerks in Commercial Offices.	500	332	702	24	1,618
Clerks in Banks, Civil Service, Law, Assurance and Ac- countants' Offices.	266	72	319	—	657
Teachers, Assistant Teachers, Pupil Teachers.	148	217	313	19	697
Students (University, Law, and Medical).	93	51	68	37	264
Occupations not included in the above classes.	608	319	378	43	1,348
Boys just left school or College.	122	109	66	—	296
Boys still in attendance at School or College.	835	1,188	749	156	2,948
No occupation stated. .	139	178	239	15	612
Total Number of Young Men.	4,936	4,338	6,515	995	16,784
Corresponding Numbers for 1906-7.	4,717	3,727	6,132	996	15,574
YOUNG WOMEN.					
Persons engaged in Farming Occupations.	1,490	2,071	1,054	1,641	6,256
Domestic Servants . .	664	208	544	60	1,526
Printing Trades. . .	8	15	13	3	39
Dressmakers, Milliners, &c.	206	129	367	53	764
Textile Industries—Designers, Weavers, &c.	50	—	347	13	410
Factory Workers not in- cluded in above.	91	58	548	12	709

## OCCUPATIONS OF STUDENTS—continued.

	Leinster.	Munster.	Ulster.	Conn- naught.	Totals.
YOUNG WOMEN.—continued.					
Workers in Lace, Crochet, Embroidery, Sprigging, Drawn Thread Work, &c.	309	523	858	282	1,972
Saleswomen, Shopkeepers, &c.	311	539	336	114	1,300
Clerks, Cashiers, Civil Ser- vants, &c.	280	96	518	35	929
Teachers, Assistant Teachers, Pupil Teachers.	474	380	1,146	137	2,117
Students (University, Medical)	28	35	84	4	131
Occupations not included in above Classes.	395	403	733	87	1,618
Girls just left School or College.	162	205	144	68	580
Girls still in attendance at School or College.	758	1,119	803	288	2,968
No occupation stated.	1,179	1,311	1,892	295	4,777
TOTAL NUMBER OF YOUNG WOMEN.	6,608	7,122	9,397	3,196	26,125
Corresponding Numbers for 1908-9.	5,864	8,077	9,023	3,128	26,092
TOTAL NUMBER OF STUDENTS.	11,344	11,460	15,912	4,193	42,909
Corresponding Numbers for 1908-9.	10,381	11,894	15,156	4,126	41,657

The Department's provision for commercial instruction by means of specially trained teachers has resulted in a great development of this branch of technical instruction. The schools already established in Rathmines, Cork, Limerick and Waterford are meeting with great success, and are obviously meeting a great need, and eight additional scholars are now following a special course of training with a view to becoming teachers of Commerce in Ireland.

The work done under the Department's Programme for Secondary Schools continues to progress satisfactorily. SECONDARY SCHOOLS. It is not anticipated that any further considerable development can take place in this branch of the Department's work, which they believe constitutes

a very valuable part of the curriculum of the Day Secondary School. The following table shows the growth and present position of the work in Irish Secondary Schools:—

Province and Year.	No. of Schools	No. of Pupils who worked through the Courses, and upon account of whom grants were payable.					Amount of Grants Earned.
		Preliminary Course, 1st Year.	Preliminary Course, 2nd Year.	Special Courses, 3rd Year.	Special Courses, 4th Year.	Totals (Individual Pupils).	
LEINSTER.							
£ s. d.							
1901-2, .	66	2,732	—	—	—	2,732	3,932 3 11
1904-5, .	103	2,128	1,363	468	119	4,078	7,530 19 0
1907-8, .	111	2,406	1,721	799	246	5,186	9,951 2 9
1908-9, .	110	2,410	1,764	975	391	5,301	10,658 2 5
1909-10, .	108	2,380	1,800	1,050	220	5,440	10,750 0 0
MUNSTER.							
1901-2, .	39	2,098	—	—	—	2,098	2,943 9 4
1904-5, .	70	1,507	867	384	52	2,810	5,350 7 1
1907-8, .	82	1,903	1,285	619	128	3,924	7,296 14 11
1908-9, .	80	1,771	1,303	768	97	3,935	7,354 18 10
1909-10, .	81	1,730	1,230	740	210	3,890	7,050 0 0
ULSTER.							
1901-2, .	42	1,596	—	—	—	1,596	2,431 7 6
1904-5, .	68	1,184	735	315	81	2,315	5,316 8 8
1907-8, .	77	1,520	1,103	491	119	3,211	7,676 19 0
1908-9, .	79	1,030	1,058	578	141	3,385	7,940 7 7
1909-10, .	78	1,020	1,120	500	160	3,420	8,050 0 0
CONNAUGHT.							
1901-2, .	7	189	—	—	—	189	268 10 5
1904-5, .	15	272	201	100	15	588	1,219 8 11
1907-8, .	19	382	276	150	38	844	1,810 8 6
1908-9, .	17	319	272	150	31	765	1,639 3 2
1909-10, .	16	310	230	160	40	739	2,270 0 0
TOTALS.							
1901-2, .	154	6,615	—	—	—	6,615	9,575 10 8
1904-5, .	256	5,091	3,166	1,267	267	9,791	19,417 3 8
1907-8, .	289	6,213	4,385	2,059	531	13,118	26,725 5 2
1908-9, .	286	6,130	4,497	2,471	470	13,366	27,472 11 11
1909-10, .	283	5,040	4,350	2,460	680	13,450	28,100 0 0

The figures for the Session 1909-10 are approximations only.



MR. VICKERS DIXON, *Senior Inspector*, reports:—

#### SECONDARY SCHOOLS.

The teaching of Experimental Science and Drawing in Secondary Schools may now be regarded as having reached its normal volume, and no material increase can be expected for some time to come.

It was thought that the change in the Intermediate Education Board's rules, whereby Experimental Science is no longer a compulsory subject, would result in a reduction of the number of schools taking these subjects. No such reduction, however, has taken place: while a few of the small schools which had not laboratories of their own and had to make special arrangements with other schools for the teaching of their pupils, have dropped these subjects from their curriculum, their places have been filled by other schools. The value of the systematic training given in the Experimental Science classes is now well recognised, and it is not likely that there will be any serious reduction on account of the above-mentioned change.

Generally, the satisfactory standard reached in previous sessions has been well maintained.

The defects in the work on the First Year's Preliminary Course, to which attention has been drawn in previous reports remain very much the same, and, as these reports stated, are due in a large measure to the inefficient previous training of the pupils. This unsatisfactory condition will probably continue till some scheme for the systematic training of preparatory pupils is put in operation throughout the country.

Changes of staff, especially in the Christian Brothers' Schools, are too frequent and are responsible for much work of a mediocre nature. School authorities scarcely realize the loss to the schools that such changes must entail. A teacher, who at the beginning of the session has carefully mapped out a certain line of investigation or course of study and proceeds to carry it out, is removed and his place is taken by another, who, even though he has the previous teacher's notes, and the pupils' records of work done, cannot, without much trouble and loss of time, take up the same line of thought or carry out the projected scheme of work in the spirit in which it was conceived.

The teaching of the specialised subjects in the third and fourth years generally is good; but in several schools, the amount of practical work carried out and the pupils' manipulative powers are comparatively small. This is due to the facts that the minimum prescribed time is given to the teaching, and that little or no regular time is set apart for preparation of the lessons. When this is the case only a few of the typical experiments, without variations, can be carried out.

In the majority of schools adequate time is not given to the preparation of the practical exercises; the teacher's work then of necessity degenerates into the mere mechanical labour of setting out apparatus upon the benches; his interest in the teaching soon flags as he finds himself unable to attempt any new treatment of the syllabuses which involve any departure from the set of experiments that he has previously mastered with his class. Here it may be noted that it is the exception to find, what should be expected in every good physical laboratory, some sort of work bench equipped with a few tools, at which small repairs could be executed and even simple pieces of apparatus made.

The teaching of Physiology and Hygiene is the least satisfactory of all the courses. Text-books are too freely used to learn what might be discovered by observation, and too much attention devoted to minute details and chemical reactions, which must to many of the pupils be nothing more than an exercise of the memory.

#### DAY TRADES PREPARATORY SCHOOLS.

The Special Syllabuses issued by the Department last year to the Day Trades Preparatory Schools have proved very useful, not only in showing how the different subjects of the curriculum may be correlated, but also in securing a more systematic and practical treatment of each section of the work of the Schools.

The progress made by these Schools generally is satisfactory. The training given in them is so much appreciated by employers, and boys, who have had only a two years' training, so readily find remunerative employment, that it is with difficulty the Schools can retain a sufficient number of boys to form a third year course. Here it may be stated that the Schools are fulfilling the function for which they were designed, the returns supplied by the Schools showing that almost all the pupils on leaving the Schools have taken up industrial occupations.

The School opened this session at Clonmel promises to be very successful, and Londonderry and Ballymena intend opening similar schools next session.

#### TECHNICAL INSTRUCTION UNDER LOCAL AUTHORITIES.

Steady progress in the work carried on by the Local Authorities may be recorded. Every county, and almost every urban district, have now approved schemes for Technical Instruction in operation, and the increasing number of pupils enrolled in classes under these schemes points to their appreciation by the people.

This increase in enrolment is most noticeable in the Schools in the urban centres in Ulster, where perhaps the direct advantages of the instruction are more apparent. It is also pleasing to note that the increased enrolment is chiefly in the classes constituting the organized courses of study fostered by the Regulations for the administration of grants to Technical Schools and Science and Art Schools and Classes, and consequently has resulted in additional financial aid to the Schools.

In every permanent centre are now to be found "Preparatory Courses" designed to prepare the students for the Specialized Courses. As yet, however, their true value has not been fully recognised, nor have they been utilised entirely for the purpose for which they were designed. Though the numbers enrolled for these courses have considerably increased, they are still much below what they should be. In several places the classes have been used merely as "continuation classes," those who attend them not passing on to the Specialized Courses.

In Ulster the relation of the Preparatory Course to the Specialized Course is best appreciated. This, no doubt, is in some measure due to the fact that nearly every scheme in the province is organised and administered by an educational expert, whose full time is given to this work and who not only is responsible for the organisation and conduct of the classes, but is also actively concerned in the teaching, and by direct contact with intending pupils is able to advise them as to suitable lines of study. In the southern districts it is the exception to find an educational expert administering a County Scheme. Here the administration and organisation is generally in the hands of a person who can give only part of his energies to the work, other county office duties absorbing a large portion of his time.

The demand for Commercial Instruction continues to increase. The School of Commerce in Rathmines was very well attended, and a very high standard was reached in the more specialised classes. The present building is quite inadequate for the requirements of the School, and the Committee have acquired a very suitable site, and hope to begin the building of a new School at an early date. In Cork also the close of the second session of the School of Commerce showed that the premises were insufficient, and an adjoining house has been rented to accommodate some of the classes. The Commercial Department of the School in Limerick opened last year promises to be very successful, and that of the Belfast Municipal Technical Institute has materially increased in numbers and efficiency. Throughout the country generally the attendance at the Commercial Classes has been very large, and considerable difficulty has been experienced in providing suitable accommodation. Much of the instruction in these classes has of necessity been of an elementary character, and, while in some instances it has suffered from a lack of the usual office appliances, in general it has been sound and practical.

Outside Belfast, Dublin and Cork, the attendance at the Engineering Courses, both Mechanical and Electrical, has been but small. This is to

be expected when one considers the positions of the centres of the Engineering trades and the expense of providing properly equipped laboratories and workshops for such courses. In Londonderry, however, Mechanical Engineering is receiving special consideration; a laboratory has been fitted up, a workshop is being equipped, and on the sound foundation of elementary classes, laid in past seasons, is growing a healthy Engineering Department.

In Belfast and Dublin alone are the numbers attending the Building Trades Courses considerable. While in almost every district there must be a fair number of those concerned in the Building trades, and while almost every School makes provision for classes for these trades, the numbers in attendance are so small that few Schools can afford to run separate classes for advanced and elementary pupils. This poor attendance seems to be due in some measure to a neutral attitude of employers towards the Schools.

The inducements offered by the Regulations for Technical Schools are leading authorities to treat the special classes for women in a more systematic manner, and to provide courses in Domestic Economy instead of mere classes in Cookery and Dressmaking. These courses usually comprise Cookery, Needlework, Dressmaking, Laundry and Housewifery; Hygiene, Home Nursing and First Aid to the injured are also often added. As yet, however, little real effort has been made to treat the different subjects as essential parts in a course of Domestic Economy or Housewifery—teaching them so that the relations that should exist between them and the economic management of a home may be clearly recognised. The want of suitable accommodation has no doubt retarded development. This has been recognised by the Rathmines Committee, and they have obtained a house in which their courses are held, and a sound endeavour made to unify the aims of the classes. In County Galway labourers' cottages have been rented for the same object.

Here it may be noted that the value of instruction in Domestic Economy and of the training that the Schools can give in these subjects is so well recognised that the National Board pays the travelling expenses of their teachers to attend special classes in Cookery at the Technical Schools. Twenty-five such classes were held and were attended by upwards of 500 teachers, of whom 492 presented themselves for examination at the close of the session. It is expected that the majority of these will present themselves for another course of training next year.

The only scheme in which any important change was made was that for County Cork. The Urban District Council of Queenstown decided to withdraw from the joint scheme and formulated one for that town. This change entailed a financial loss to Queenstown for the first year at least of their working alone, and, though they employed jointly with the County Committee some of their teachers, the progress of the School has been retarded.

At Bangor, Carrickfergus, and Newtownards the new School buildings were completed, as was also the extension of the Belfast Municipal Institute, but it was late in the session before the buildings were ready for occupation by the classes.

At Limerick, Cork, Larne, Enniscorthy and New Ross the buildings referred to in the previous report are progressing, and at Enniskillen the infirmary in connexion with the old jail is being altered and re-fitted, so as to provide accommodation for the classes in this town. Steps are being taken to build at Arklow and Baltinglass, and at Portadown the attendance is increasing so much that it is evident that larger premises must be provided shortly.

The County Fermanagh Committee maintain at Enniskillen a School for the training of lace and crochet teachers. The course of Training comprises instruction in Drawing, Design, Business Methods, Laundry, Hygiene, and either Lace or Crochet making. As yet the numbers presenting themselves for training are but small, but there is no doubt that the project is a wise one, as without competent teachers, capable of modifying existing designs and preparing new ones to order, and familiar with ordinary commercial transactions, no improvement in the teaching and management of the Lace and Crochet Classes in the county can be effected.

Mr. O'SULLIVAN, *Art Inspector*, reports :—

#### SECONDARY SCHOOLS.

In Drawing, sound educational work was generally done; the standard reached was decidedly good, and a slight but distinct improvement on the work of last year was noticeable.

A stage has now been reached in the best Schools, where only slight variation in the quality of the work done is likely to take place from year to year.

Most of the teachers take great interest and apply themselves very industriously to the work, and in the Schools where only a low standard was reached, it was, in many cases, due to circumstances over which the teachers had little or no control, such as insufficient time, unsuitable equipment, or large classes.

Only a few Girls' Schools and very few Boys' Schools take the special courses in Drawing. The number would probably increase, if it were realised that the subject, as well as being a most valuable part of a general education, is of great use in studying for any profession, and most important for those who wish to become Artists, Designers, Architects, Engineers, etc.

Modelling in clay was taught in only a few Schools.

In Model Drawing, the standard reached varies much more than in any other subject of the Drawing Courses. In a few Schools excellent work was done in this subject, and the pupils in the Special Courses were taught to draw both exterior and interior views of portions of buildings, etc. These exercises excited great interest on the part of the pupils, and added considerably to the practical and educational value of the subject. There were some Schools, however, in which progress in this subject was retarded owing to want of suitable desk accommodation.

#### DAY TRADES PREPARATORY SCHOOLS.

In the Day Trades Preparatory Schools the teaching of Drawing has been, on the whole, very satisfactory. The courses have been drawn up on practical lines. Suitable examples, such as details of Machinery, Joinery, etc., were selected and used as examples in Model Drawing, and the educational value of the courses in most Schools was enhanced this year by giving particular attention to the making of dimensioned sketches from actual working models. In a few Schools the teaching of Solid Geometry was defective; more attention was given to the production of a large number of exercises rather than to a sound and thorough training in the principles of orthographic projection.

#### ART CLASSES AND SCHOOLS OF ART.

The Technical School Art Classes produced good and useful work during the year. The unequal attainments of pupils joining these Schools still add to the difficulties of teachers of the Preparatory and First Year's Courses.

In Schools of Art satisfactory progress was made, but in the Craft classes, both in the Technical Schools and Schools of Art, though "works" have been executed which were good and even excellent in technique, and showing that sufficient attention was paid to Drawing, Principles of Ornament, and Design, there is room for much improvement in this direction in many Schools.

Mr. TURNBULL, *Inspector for the Southern District*, reports :—

#### COUNTY SCHEMES.

The County Schemes were based on the experience of previous sessions, and had certain features in common. Manual Instruction in Woodwork was provided for boys and young men in all counties, except Limerick. Manual Training in Woodwork, with accompanying drawings in plan and elevation, has proved invaluable in developing manual dexterity and intelligence in young men. The instructors in charge of these classes were also employed, either concurrently or at different hours, in giving

instruction to tradesmen in Building Construction, Carpentry and Joinery, Wood-carving and kindred subjects, which were of use in the daily occupations of the students. Provision was made by all counties for the instruction of young women in Domestic Economy, including Cookery, Needlework, Household Management, Hygiene and Laundry work. Care was taken by most of the instructresses to adapt their teaching to the needs of their pupils, who attended very regularly and benefited by the training. The demand for these courses by young men and women, respectively, showed no signs of falling off, and where the instruction was really efficient little difficulty was found in maintaining a good attendance and a satisfactory standard of work.

County Cork was the only county which afforded systematic courses in Commercial subjects, and these were rendered necessary by the demand of urban centres that participate in the County Scheme. Three specially trained instructors conducted classes in Book-keeping, Business Methods, Shorthand and Typewriting, and at most of the centres large classes were obtained. Owing to the difficulty of supervising instruction in Typewriting, due to the limited time available, the Committee resolved to remove that subject from the list, and in future the Courses will consist mainly of the three other subjects. The students were drawn from the business houses, as well as from those who had just left school and who were preparing to enter business. Such instruction is much required, because many shopkeepers have no systematic method of keeping accounts, and in many cases stock-taking is not practised.

Instruction in Art by means of Itinerant Instructors was continued in Counties Cork, Kerry and Waterford. In the first-named county a good feature of the instruction was its application to the decorative trades; and, to a limited extent, painters, plasterers, wood-workers and metal-workers received valuable lessons which were directly useful to them in their respective trades. The instruction in counties Kerry and Waterford was of a more elementary nature, and its application to craftsmanship of a limited extent. In all counties, except Waterford, there were Industrial Classes for young women. These classes were conducted at Convent centres, but there were also classes at various centres in County Cork, under the supervision of local committees, and these classes were taught during short periods by the County Instructresses. The work was variable, and consisted of Needlepoint and Limerick Lace, Irish and French Crochet, simple Dressmaking and plain Needlework. The workers earned from 5s. to 10s. per week, in addition to finding time for household duties in their own homes. The majority of the workers, however, spend only a few years at these classes which serve as a temporary means of adding to the family income, but very few of the industries are sufficiently promising to be able to establish themselves on a permanent and independent basis.

Scholarships for Primary School boys, tenable at Secondary, Technical or Day Trades Preparatory Schools were awarded by Counties Kerry, Tipperary (N.E.), Limerick and Waterford, but experience since the inception of these Scholarships has shown that it is difficult to bridge the hiatus between the Primary and Secondary Schools, and further that the general programme of a Secondary School is not the most suitable for boys avowedly intended for trades.

Scholarships for the training of girls in Residential Schools of Domestic Economy were awarded by Counties Cork, Tipperary (N.E.), Tipperary (S.E.) and Waterford, and proved of much value to the girls who underwent a year's training, and then returned to their own homes to practise and to spread the knowledge of the principles learned while in residence. The Residential schools are those at Dunsanway, Carrick-on-Suir and Dundrum, managed by Convent authorities, who are assisted by specially trained lay teachers. In addition to the usual household subjects, the girls are taught Dairying, Gardening, Poultry-keeping, and other subjects pertaining to life on the farm. The demand for residence and training in these schools is good, and the number of Scholarship students is exceeded by the number of fee-paying students. There is also a Higher Class School of the Residential type for the training of young ladies at Waterford, under the management of the Ursuline Convent, and the Course of practical and theoretical training is sound in every respect.

## CITY AND URBAN SCHOOLS.

Schemes of Technical Instruction were continued in the County Boroughs of Cork, Limerick and Waterford, and in the urban centres of Clonmel, Queenstown, Tralee and Tipperary (Joint Urban and Rural).

(a). *Instruction in Pure and Applied Sciences.*

Cork and Queenstown are the only two of these centres that have well equipped workshops for Engineers, with a correspondingly well developed Engineering Course. Clonmel ranks next in its engineering outfit, while Limerick and Waterford have made fair provision for instruction in Mechanics, and there is promise of further development in the last two centres. Tralee will include Engineering in its scheme when the new School has been erected; meantime its students have to be satisfied with a Course in Machine Construction and Drawing.

The Course in Building Trades' subjects was very efficiently treated at Clonmel, Tralee and Waterford; steady progress was made at Limerick, but the classes in Cork were poorly attended, owing to various causes. In none of the city centres, however, was the attendance of Building Trade students commensurate with the number and needs of the workers.

In Cork and Limerick, Courses were provided for other trade students, such as printers, tailors, painters and decorators, but the main difficulty hitherto experienced has been that of securing students of a satisfactory standard of general education. A good example of co-operation between Committee and Employers is the Course for plumbers in Cork. This Course almost failed a few years ago, but the Committee with the help of the Master Plumbers, re-organised the Course, and the apprentices and journeymen who have attended have gained in skill and proficiency by the sound practical training they have received.

When local circumstances required it classes of a special nature were provided, e.g., the excellent class in Naval Architecture at Queenstown, the class in Road Carriage Building at Clonmel, and the class in Boat-making at Cork. In many trade classes, however, it is difficult to obtain a sufficient number of students who are sufficiently interested, and employers are often apathetic. Efforts have been made in some of the more populous centres to discuss with the employers of labour the factors of modern progress in trade, and sometimes with beneficial results. A workman with technical knowledge beyond that of the workshop is a valuable asset to his employer, and if employers would award a premium to each workman who improves himself by study much greater progress would be made in industrial development.

(b). *Day Trades Preparatory Schools.*

Day Trades Preparatory Schools and Day Courses for Apprentices have been established during the past few years. The former are the more important, and are three in number in the Southern District. Queenstown Day Trades Preparatory School was the first in the district, and did good work in the past few years, but has not been successful during the past session, and unless the Committee take steps to foster it and secure the attendance of suitable pupils the question of its continued existence will arise. The second School to be established was that under the Waterford City Committee. The pupils there are of the ordinary school-boy type of average intelligence, and they have made sound progress under training of a systematic and practical nature. The success of this School has been due largely to the keen interest taken in it by the Committee and to the able co-operation and efficiency of its teaching staff. The boys who have been trained in this School have given great satisfaction to their employers, and in some cases their wages have been increased and their term of apprenticeship shortened in recognition of the valuable practical training conferred. The third School is that under the control of the Clonmel Committee, and it passed through its first session, 1906-10, with a highly satisfactory record. The boys generally were above the average in physique and intelligence, and responded readily and diligently to the very efficient instruction imparted to them.

(c). *Day Classes for Apprentices.*

While the Day Trades Preparatory School acts as a connecting link between the Primary School and the period of apprenticeship, the Day Courses for apprentices make provision for those who have already begun their life's work. These classes are conducted by instructors at convenient hours during the day, and not later than 6 p.m. Employers of labour undertake to give their apprentices time off for attendance at the day classes, and since the latter are considered as equivalent to working hours, there is consequently a very regular attendance. The employers are satisfied that they do not lose by such an arrangement, owing to the increased skill and intelligence of the apprentices, who show their appreciation of their privilege by assiduous study as well as by further attendance for instruction at evening classes. Day classes for apprentices have been in existence in Limerick for several years, and separate courses were drawn up for Engineers, Building Trades students, and Painters and Decorators, but the only recognised Course that persisted during the session, 1909-10, was that in Engineering, which was well attended, although the standard of instruction was not high owing to the defective general education of many of the students. The master builders of Fermoy have acted in a praiseworthy manner in having permitted their apprentices to attend Day Classes each year since the Session 1905-07. The instruction has proved very suitable, and very satisfactory progress has been made by the students. Good Apprentice Classes in Building trades and Engineering subjects were conducted in the Clonmel Technical School during the three sessions, 1906 to 1909, but, owing to the development of the Day Trades Preparatory School during the past session and the limited staff of the school, these classes could not be continued. Similar classes were opened at Waterford last year; the attendance and progress of the students were encouraging, and augured well for the future. An attempt was made to establish Apprentice Classes in Tralee, and there was promise of success, but the classes had to be disbanded after a few meetings because of the lack of co-operation among the Master Builders. The Tralee Committee, however, may be able to re-organise these classes.

(d). *Schools of Commerce and Commercial Courses.*

The development of Commercial Instruction within recent years has been almost phenomenal. Highly-trained Instructors are now engaged in Cork, Limerick, Waterford, Clonmel and Tralee. Schools of Commerce have been established at Cork and Limerick. The former passed through its second session with greatly increased attendances, and a very satisfactory standard of efficiency, and the latter completed its first session, 1909-10, with a fair measure of success. At the three other centres the Commercial Courses were well attended, and the students made good progress. The great majority of students at these Commercial Schools were drawn from business houses, and the higher subjects attracted those of considerable business experience.

(e). *Schools of Art and Art Courses.*

Schools of Art are included in the schemes of Cork, Limerick and Waterford, and Art Courses are conducted at each of the urban centres. The Cork School continued to produce good results in Pure and Applied Art, the latter consisting of Lace Design and Lacework, Metal and Enamel Work, Clay Modelling and Wood-carving. At Limerick and Waterford the ordinary studies in Pure Art were mostly of an elementary character, and life studies were of the simplest type. The Day Classes at these two Schools were poorly supported, and require re-organisation. There are few openings for Art students, except in the Crafts, and no effort should be spared to capture students for Applied Art.

## SECONDARY SCHOOLS.

The teaching of Experimental Science, Drawing and Woodwork shows gradual improvement. Many Schools have selected Courses for the third and fourth years of study, and based their choice on educational grounds, with a view to providing the kind of training most beneficial to their

students, whereas formerly the Courses were selected more from the point of view of what the teachers were qualified to impart, irrespective of the requirements of the pupils. For example, the majority of Girls' Schools have given up special courses in Chemistry and Physics, and adopted those in Domestic Economy, Botany, Physiology and Hygiene, which are much more suitable for girls. From the practical nature of the training, the orderliness of the laboratory, workshop and kitchen, and the careful recording of observations, the Department's Courses influence all branches of School work, and in past years have helped to enhance the value of Secondary education. At the same time it is still to be regretted that the pernicious system of repeatedly changing teachers should be permitted to continue, as it is detrimental to the best interests of education.

#### PRIMARY SCHOOLS.

Drawing and Manual Instruction were continued at Primary and Industrial Schools. Of the forty schools taking Drawing, nearly one-half of the number obtained the highest award for excellence. Only eleven Schools, however, included Manual Instruction in Woodwork in their Programme, and seven of these were Industrial Schools where the Manual training was helpful to the boys who were learning trades.

#### GENERAL.

Experience of the organised Courses of Instruction in Technical Schools has shown that, by adopting curricula of study along lines most suitable to their respective callings, the students have derived greater benefit than under the old system of more or less discursive study. The Preparatory Courses, of which much was expected, have failed in most of the smaller centres, where the available students were too few to form successful classes; there was a good demand for them in the city and larger urban centres, but satisfactory attendances were maintained only when the teachers proved of more than average ability and energy.

General progress was marked by the increase in the number of Schools of all types, by the greater support given to Technical Schools, and by the continued demand for instruction at Itinerant Courses in rural centres.

MR. SMILE, *Inspector for the North Central District*, reports:—

#### COUNTY SCHEMES.

No new features of importance have been introduced into these schemes, but the work already set in operation has been steadily extended and modified as local circumstances have required.

The Itinerant Courses in Manual Instruction and Domestic Economy have, almost without exception, been most successfully conducted and supported, and, both in new centres and in old centres revisited, there is evidence of a keen desire to make the most of the instruction provided. The difficulties of obtaining suitable premises continue, and in some few outlying centres difficulty has been experienced in forming two classes per day, so that the time of teachers has not been so fully utilised as is desirable.

Short Itinerant Courses of Commercial Instruction in Business Methods, Book-keeping, etc., were also given when the Commercial Instructors were set free from the Winter Session in the Technical Schools. The local interest taken in these Courses has been very satisfactory, and instruction of this type appears to meet a want felt in the smaller towns with populations from 800 to 3,000.

The interest evinced by some of the local Committees is most gratifying, but unfortunately there are still a few districts where classes are rarely visited by members of county and local committees.

Lace classes have been conducted in County Meath and in County Dublin, and some definite progress has been shown on the work of previous years. There is, however, far too little local interest taken and effort made to put these classes in a position to become self-supporting, and the prospects of their ultimate success are remote. Either they must be



taken over and run as part of a large business organisation, which will give due attention to the collection and marketing of goods, prompt despatch of orders and settlement of accounts, or they will cease to exist when the subsidies given by the Committees of Technical Instruction are withdrawn. The class in Wood-carving has been continued at Stradally (Queen's County), but it is in a similar position to the lace classes.

The other features of certain county schemes are scholarships for boys and girls. The scholarships for boys have been held at various secondary schools, where a general intermediate education has been given with a definite required amount of Science, Drawing, Mathematics and Manual Instruction. The scholarships for girls have been held at Residential Schools of Domestic Economy; the Courses of instruction given in this connection have been of a useful and practical character, and should prove of real value to the scholars in later life.

#### COUNTY BOROUGH AND URBAN DISTRICT SCHEMES, INCLUDING TECHNICAL SCHOOLS CONDUCTED UNDER COUNTY JOINT SCHEMES.

The operations of the Technical Schools generally show a record of steady usefulness and increased efficiency, although no remarkable increase in numbers can be recorded.

The aims of the instruction are gradually becoming clearer on the part of both Committees and teachers: while it may be said that the operations of all the schools are severely restricted by financial considerations, much may be done in cutting off the weaker branches and developing those that show distinct signs of vitality. Economy of working is in several cases the item on which the efforts of Committees and Principals are chiefly focused, and the free consideration of sound educational schemes and experimental classes has thereby been distinctly hampered.

It is gratifying to record that in cases where efforts have been made to gauge the local educational requirements, and to provide instruction in accordance therewith, very satisfactory results have been forthcoming. Such cases as the Course in Cotton and Linen Bleaching in Drogheda, the specialisation in Commerce and Domestic Economy at Rathmunes, the Courses in Domestic Economy and Gardening at Kingstown, and the classes in Motor Engineering at Ringsend, call for special commendation, inasmuch as they mark clearly defined efforts, some of them indeed only in an experimental stage, but efforts which are full of promise.

The requirements of the Regulations for Technical Schools, etc., have induced a careful survey of the field of operations in each district, and the courses drafted, and taken advantage of by students, have proved of great service. In many courses, however, subjects are included which have not a direct bearing on the occupations or requirements of students, and for the present, at least, a more restricted range of studies must be regarded as necessary. The "technical school-life" of any individual student rarely exceeds three years, and the ideal proposition of laying a thorough and solid foundation is only partially possible in that time, while the specialised instruction which it is desirable to bring to some well defined finishing point is seldom completed.

As a whole, it may be said that the results of the Preparatory Course are most disappointing. The function of this Course "to fit students to take up a specialised course of technical instruction," and also to repair defects of general education, is sufficiently clear, but the amounts of grants paid for the attendance of students qualified show that very much remains to be done, particularly by the Principals of Technical Schools, in emphasising the advantages of this preliminary training, and in securing the very brightest and most capable teaching of the subjects covered by it. In many schools there is a necessity not only for a very much larger proportion of students taking the Preparatory Course, but for the Preparatory Course to extend over two years, in the second of which the syllabuses should be wholly distinct from those of the first year and more advanced in character.

The policy which endeavours to have students classified as "specialised" at the earliest possible opportunity, so that higher rates of grants may be secured is not wise, and some of the early falling off in attendances can readily be traced to the effects of this procedure.

The concurrent instruction of students of varied types in certain classes, such as Mathematics and Geometry, is not securing the best results possible. In the smaller schools it is difficult to avoid this overlapping, but by a more extended use of the Preparatory Course, and then by the application of the regulation permissive of a two years' specialised course in small schools to provide really specialised courses for definite types of students, some improvement might be made possible.

The influx of students to Technical Schools is a matter of some irregularity, both in time of their entering schools and in the sources from which they are drawn, and it is most important in the interests of future developments and of stability in the School organisation that some definite line of action should be taken to ensure that the advantages and opportunities afforded in Technical Schools shall be made known to likely candidates for admission, such as National and Secondary School pupils leaving school, employes in the various branches of commerce and industry, etc. Many pupils of Technical Schools in recent years have been those who were already well advanced in their business and who utilised the novel instruction afforded, but, as a class, the supply of such students is soon exhausted, and there is needed some more systematic dissemination of information than has yet been generally adopted: in this connection much remains to be done in securing the interest and sympathy of National and Secondary School teachers. It is not sufficient to trust to promiscuous advertising, to the influence of students on their fellows, and to the realization, usually late in life, of personal requirements for advancement in business.

To aid in making the operations of Technical Schools more widely known, it is necessary that schemes should be made and prospectuses published much earlier in the year than is at present done; such information as students require should be available early in August.

The beginning of the winter season is frequently delayed by the unpreparedness of the general programme, and throughout the Schools in North Leinster an earlier beginning could be made with great advantage. The slow entering of students and the resultant difficulties in class instruction do not constitute, as is sometimes supposed, an argument for a late beginning. Only by consistent and strenuous efforts extending over a period of years, can improvement in the matter of early enrolment and punctual commencement of classes be made, and it is known that the results will ultimately justify the efforts put forth. The evening hours available for instruction are so limited in number, and the attendances made by students generally involve such sacrifices, that the very highest skill in organisation is required and should be brought to bear on the problem.

An increase in the quantity and an improvement in the quality of the homework of students is being steadily effected, but the systematised recording of marks is not yet generally adopted.

Additional premises have been secured in Bীর and Ringwood, and the equipment has been advantageously rearranged in Dundalk.

It is hoped that the erection of new buildings will shortly be undertaken in Rathmines and Navan. There are other centres (Drogheda, Tallamore, and Maryboro') in which the need for new and suitable buildings is very urgent to secure a continuance of the good work being done.

In the County Borough of Dublin, the administration has left much to be desired. The classes previously in operation were continued, but the experience of former sessions was not utilised to cope effectually with the serious problems arising in respect of overcrowding, arrangement of classes, and extensions of the instruction necessary for the needs of the community.

An interesting experiment was made in Rathmines in a six-weeks' course of Household Management, held at the conclusion of the winter session. The classes met for five hours daily, on five days each week, and the instruction included Cookery, Laundry, Sewing, Hygiene, and First Aid, and the Keeping of Accounts. A limited number of students was enrolled, and the results of the course were distinctly satisfactory. It is hoped that courses of a similar character will be organised in other centres.

Instruction in Domestic Economy to National School teachers was set in operation in several centres, and proved eminently advantageous.

Day Trades Preparatory Schools were continued at Ringsend and Blackrock, in conjunction with the other operations of the Committee, and the instruction given was very suitable in type to the needs of the pupils, who generally obtain employment in business houses or manufacturing establishments.

The limitations of funds of the Technical Instruction Committees, to which reference has already been made, have also been responsible for the slow development of School libraries. It is felt that much real value would attach to the provision, in Technical Schools, of a suitable Reading Room furnished with a library of books bearing upon the specialised instruction given in the School. The ordinary Public Library does not fulfil this requirement, and in it the specialised text-books required are seldom found.

The School interests might also be generally broadened by a variety of occasional lectures upon subjects of scientific, literary or other interest. Some efforts have been made in this direction, the formation of a Gardeners' Society in connection with the Kingstown Technical School being a useful example, but much more of this type of incidental instruction is desirable, not only from the immediately utilitarian point of view, but with the object of fostering the interests and sympathies of students in the Technical School work as a real force in their midst.

#### SECONDARY SCHOOLS.

The general standard of Science teaching has been satisfactorily maintained during the session, and in particular cases work of an excellent character has been secured. The total number of schools (70) in the district which provide courses in Science instruction is the same as last session, two new schools having replaced two others which have fallen out. The schools, with only a few exceptions, are provided with suitable and well equipped laboratories, and improvements in accommodation are steadily being made, some of the earlier laboratories having been remodelled or replaced by more suitable rooms.

The equipments are generally good, although there is a tendency, when changes of teachers are made, as unfortunately happens frequently in some few schools, to neglect the necessary replacing of broken and defective apparatus. It is to be regretted that the influence of the Summer Courses in Laboratory Arts is little shown in the Schools, and that many teachers are entirely dependent on dealers for repairs of the simplest kind, while generally there is little effort to construct or devise new pieces or types of apparatus. This cannot altogether be wondered at when it is obvious that many teachers give a minimum of time to preparation, and that even the necessary laboratory arrangements for practical work are not always properly thought out and made, and consequently valuable time is wasted.

In this respect there is not much to choose between specialised teachers and teachers only partially engaged in Science teaching.

There still appears to be difficulty in initiating pupils into the work of the First Year Course, and the results of that course are, perhaps, the least satisfactory of all. Ideas of investigation, practical experiments and self-reliance are novel, and there is naturally a slow beginning, but the difference in method is only in part accountable for the slow progress made in some Schools. Teachers complain of pupils coming to them at the ages of 12 and upwards with a weak knowledge of Arithmetic and English, and the general School curriculum usually requires that such pupils shall do Preparatory Grade work, including Science. The initial weakness in many cases of those entering the First Year Course is responsible for slow progress and a possibly acquired distaste for the subject. A considerable amount of dexterity in manipulation, weighing, etc., is frequently acquired without a corresponding ability to work out the results of very simple experiments, and until this fundamental defect is rectified an efficient standard in a number of Schools will hardly be reached.

There is no evident effort being made to withdraw the Mensuration portions of the First Year Syllabus to their proper sphere in the Mathematics classes, and the ideas of investigation which could well be intro-

duced through Mathematical classes are wanting. With this handicap it is not surprising to find that many Schools do not adequately cover the Syllabus, and that the Sections on the Measurement of Time and on Heat are omitted.

More attention to the applications of the principles taught in the First Year Course, and to the historical development of the subject in the Second Year Course would add greatly to the pupils' interest.

The Department's rule allowing pupils of a weaker standard to repeat a course has been very generally availed of, and there is clear evidence of its utility and value.

In this district, 394 boys and 207 girls repeated courses, and of these 500 were in the Preliminary Course. So far there has been no abuse of this provision, and Schools appear to find it most helpful, while Inspectors upon occasion recommend certain pupils for repeat courses.

The Drawing Courses have made very satisfactory progress, and a much wider and freer interpretation of the subject is being given with the adoption of the Revised Syllabus. There is still difficulty in Model Drawing in a number of Schools owing to the unsuitability of desks. In the teaching of Drawing, the blackboard is not as freely used as is desirable.

A good standard is maintained in Manual Instruction and Domestic Economy, although the former subject shows a tendency to be neglected in some places for subjects of the Intermediate Education Board's programme. The value of the latter subject is being more widely recognised, both by School managers and parents, and the pupils invariably show the keenest interest in the subject. Allied with Physiology and Hygiene, there is hope for a general recognition of a widening of the basis of education for girls, so that their school training will, in part, have a directly useful bearing on their future vocations.

#### PRIMARY SCHOOLS.

A very satisfactory standard of Drawing continues to be maintained throughout the twenty-four Schools which take the subject.

In certain Schools, where definitely graded schemes of work have been adopted, the progress of the pupils has been most marked. The formation of properly arranged schemes of study in all Schools is very necessary.

In Standards I. and II. a very welcome improvement has been effected in some Schools by substituting paper for slates, but a general use of paper is not yet made.

The size of the classes, particularly in Standards I. and II., still renders the work of teaching extremely arduous; the average number of pupils during the past session in each class being in Standard I., 67; Standard II., 68; Standard III., 51; Standard IV., 41.5; Standard V., 39; Standard VI., 13; Standard VII., 8; while the average number of pupils to each teacher was higher, viz.:—Standard I., 83; Standard II., 80; Standard III., 66; Standard IV., 64; Standard V., 58; Standards VI. and VII., 23.

Manual Instruction has been well taught on sound and useful lines, and the general results are of a highly satisfactory nature throughout the district.

Dr. GARRETT, *Inspector for the Northern District*, reports:—

#### COUNTY SCHEMES.

Each of the nine counties in Ulster had a Scheme of Technical Instruction in operation during the past session. The objects and organisation varied somewhat in the different counties. The Antrim, Armagh and Down Schemes dealt solely with the Rural Districts, although each of these counties contains small Urban Districts, which could not support independent Technical Schools. The Antrim Scheme has, however, now been reorganised so as to provide Technical Schools in the coming session at Portrush, Ballyclare and Antrim. In the remaining six counties there were Joint Committees representing the County Council and the Urban District Councils of towns within the county, which were not otherwise provided for. The Londonderry and Tyrone Schemes are in charge of

Principals who not only act as secretaries, but are also experienced teachers taking an active part in the instruction given in the Schools. This system is, without doubt, the best and most successful yet tried, as it is evident that educational institutions are most likely to be successful when controlled by men trained to meet educational problems. In Fermanagh, where there is only one Urban District—Enniskillen—the Scheme is worked by a Secretary, but the Technical School at Enniskillen is in charge of a Principal. The other three Joint Schemes—Cavan, Donegal, and Monaghan—are worked by Secretaries without educational experience, with the result that the towns in these areas are unprovided for, except by occasional itinerant courses, and there is naturally some dissatisfaction. An experiment was tried in Castleblayney, where a School was organized and instruction given in Building trades and Commercial subjects. The responsibility for the working of the School devolved upon the Building trades teacher, and the progress made was very encouraging. It is proposed to extend the experiment in the new session to Clones and Monaghan, but permanent success can scarcely be expected, unless there is close supervision of the Schools by an experienced teacher.

In all the counties itinerant classes were held. The number of the courses was 110, of which 48 were in Woodwork, 59 in Domestic subjects, two in Commercial subjects and one in Art. The number of courses held was smaller than in the previous session, owing to the tendency to increase the duration of Domestic Economy Courses and to centralise the work in Technical Schools. The latter tendency is one which will require to be carefully watched, lest it should lead to neglect of the Rural Districts. The interest in itinerant work has been well maintained, but in some cases the neglect to form a local Committee prior to the opening of the classes led to their being but slowly filled. The type of work carried out was creditable and suitable to the districts in which the courses were held. The great majority of the students were of the farming and labouring classes. In the evening Woodwork courses it is now the universal practice, after a sufficient training in the manipulation of tools and the construction of the more useful joints has been given, to proceed to the making of articles such as are in constant use about farms. Many of the students have bought sets of tools and continue to employ the knowledge gained after the courses have terminated. In Domestic work the instruction tends to become less specialised and to cover a wider range of household work. It must, however, be noted that where the work of Domestic Instructresses is confined entirely to itinerant courses, necessarily of an elementary character, many of them gradually lose in freshness of manner and breadth of treatment of their subject. This is not noticeable in the case of those who are partly employed in Technical Schools, and points to the need for the infusion of new ideas and higher ideals by Summer Courses or other means.

Instruction in Lacemaking or Sprigging has been given in Cavan, Donegal, Fermanagh and Monaghan. Classes have been held at 35 centres. Those held in Cavan and Fermanagh have been very successful, and stable industries with a very encouraging output are gradually being formed. In the former county, the system of capitation grants was discontinued and direct payment of teachers substituted. This system is found to give greater satisfaction, and the regulations now in force in all four counties are leading to the accumulation of a satisfactory working capital and to reduction of the cost of running the classes. In Monaghan, too many classes for the number of teachers employed were formed, with the result that the instruction was not sufficiently intensive. In Donegal the classes have proved successful where the teachers were placed in suitable districts and the classes made permanent, but there is an unfortunate disposition to remove teachers in an ill-considered manner.

The School for the Training of Lace and Sprigging teachers was continued at Enniskillen, and has trained a number of teachers not only in the industry itself, but also in commercial methods and artistic design.

Eight Technical Schools have been conducted by the Joint Committees during the year at Enniskillen, Limerick, Magherafelt, Castleblayney, Cookstown, Dungannon, Omagh and Strabane. Those at Limerick and Castleblayney were new, and their first session was considerably more

successful than had been anticipated. In the former an excellent building was secured through the generosity and public spirit of a number of persons in the district. The new building in Stubbins became available during the session, but the equipment and arrangement of it are not yet satisfactory. Better premises were secured in Omagh, and arrangements are in progress for fitting up a more suitable building in Enniskillen. The instruction given in these Schools consisted chiefly of the Preparatory Course, together with specialised courses in Commercial, Banking Trades, Art and Domestic subjects. The demand for Art and Pure Science classes was small. Commercial classes, on the other hand, were well filled, as were also the Domestic Economy classes, except in some of the Tyrone Schools. Generally the instruction was of a satisfactory character, and good attention was paid to preparation of lessons and to home exercises.

A serious difficulty is met with in the smaller County Schools, owing to the impossibility of providing separate advanced classes in such a variety of subjects as are usually taught. The chief remedy for this seems to be to incorporate in a few broad general courses all essential matter, and not to attempt such a wide range of individual subjects. The new regulation allowing small Schools to dispense with a Third Year Course will also assist in doing away with the undesirable practice of concurrent instruction.

#### COUNTY BOROUGH AND URBAN DISTRICT SCHEMES.

There were again 17 independent Urban Schemes in operation during the session in Ulster.

The housing of the Technical Schools conducted under these Schemes has now reached a very satisfactory condition. With the exception of Armagh and Larne, where new buildings are in preparation, all the Schools are well housed. The new buildings at Bangor, Carrickfergus and Newtownards were completed in time for occupation during the session and constituted a marked advance on the temporary buildings before used. The School at Banbridge was extended so as to provide sufficient accommodation for all the classes and obviate the use of two separate buildings, one of which was unsuitable. The extension of the Belfast Municipal Institute has been completed, and provides accommodation for teaching a number of subjects which hitherto could not be attempted. It is of interest to add that an excellent gymnasium for the use of students forms part of the new wing.

The equipment has generally been well cared for, and while scarcely adequate, in many cases, it is being gradually added to as funds permit. In one School—Lurgan—there is insufficient storage accommodation leading to want of neatness and to rapid depreciation of the value of apparatus.

The work of the schools has been carried out mainly by means of Evening Classes. In the case of Belfast and Portadown, however, Day Trades Preparatory Schools were again successfully conducted. Day Apprenticeship Classes for Engineering students have also been held in each of these centres, but the number of students who were allowed by their employers to attend was disappointingly small. A Day Technical School has been conducted at Belfast, but up to the present the number in attendance shows that the value of the instruction, which is much broader and more complete than can be attempted in Evening Classes, has not been adequately realised. Some very useful work has been accomplished in the training of National School teachers. For several years past Science and Drawing Classes have been organised for their benefit, but during the past session Domestic Economy was added to the programme. Altogether 37 classes were held, of which 11 were in Science, 6 in Art, and 20 in Domestic Science.

It may truthfully be said that the Evening Technical Schools now take a large and important part in the education of the young people of the Northern District. In 11 of the Schools there was a marked increase of students; in the other six Schools there were decreases, but these were very slight, except at Lurgan and Coleraine. The net result was an increase of over 10 per cent—more than 1,000 additional students.

Coming to the work done, it is noteworthy that the rate of growth of the classes in the courses varied with the nature of the course, being greatest in the case of Domestic Economy and Commercial subjects. Other courses show steady but slower growth. Each of the Schools now conducts a Preparatory Course; these Schools, which last year gave very little attention to it, have now realised its importance and have succeeded in inspiring interest and enthusiasm in the classes. The usefulness of the course, which may be gauged by the extent to which its pupils proceed to specialised courses, is still variable. In some of the Schools practically all the students go forward, in others little more than half. In Belfast it has been found that the endeavour to induce trade students to take the Preparatory Course prior to specialisation has deterred a number of promising students. It has, therefore, been decided to offer them a course consisting of English and Mathematics of a Preparatory nature, together with their Trade subject.

The work done in the Specialised Courses has been generally good. Much enthusiasm was shown by the teachers; the instruction gave evidence of careful preparation, and a good proportion of the students devoted extra time to Home Work Exercises. These exercises have in the past session been more thoroughly organised. Records of the marks assigned were kept and taken into account in the award of prizes. The filing system has been almost universally introduced.

In almost all of the Schools it has been found that there is little demand for Pure Science Classes, but useful work in this direction has been incorporated into a number of the Preparatory Courses. Applied Science, on the other hand, is in good demand. Of the various courses coming under this head, that in Mechanical Engineering is much the largest, and it is satisfactory to note that fairly advanced work has been accomplished in Belfast, Derry, Ballymena and Coleraine. In other industrial centres—namely Newry—the Mechanical Engineering Classes were small and very elementary. Electrical Engineering has not been seriously attempted, except at Belfast and to a small extent at Derry. Textiles continue to be successfully taught at Belfast and Lurgan.

The Building Trades Course is of very slow growth, but in some of the Schools—namely Belfast and Carrickfergus—satisfactory numbers were enrolled and good work done. In most of the other schools, notwithstanding the efforts made to secure good classes, the support given was disappointing.

Commercial Courses have been established in all the schools, and the attendance was large and well maintained. In Derry and Lurgan this section of the work has not been as successful as might be expected from the importance of the districts. Much of the instruction throughout the province was of a somewhat elementary character, being confined to mechanical business processes, but the Schools are giving increased attention to broader and higher work. Modern Languages were taught in 11 of the Schools, and, where a conversational method was adopted, interest was well maintained and a satisfactory standard of efficiency reached.

The introduction of Cookery Classes into Derry completed the chain of Domestic Instruction in the Ulster Schools. The demand for such work has been heavy, and it has been difficult for the Schools to meet it. In Belfast, Derry, Portadown, Ballymena, Ballymoney, Larne, Banbridge and Newtownards difficulty was experienced in providing for all who wished to join, and Schools, which, not many years ago, provided only a few hours' instruction per week, have been forced to employ one or more whole-time teachers. The instruction given was generally good, greater attention was paid to neatness and orderliness, but the grading and systematising of the work leave something to be desired. Further, little has yet been done to give a practical training in Housewifery on account of the difficulty of providing suitable means for practice. A few of the schools tried the experiment of conducting classes for National School pupils under National Board Regulations. The grants paid were found insufficient to cover the cost of conducting the classes and a small additional fee was charged. If it is generally possible to obtain such fees the Technical School will be able to solve satisfactorily the difficulty of instructing in domestic work the pupils of National Schools in small towns.

Art Courses have been taught in each School, the principal centres being the Schools of Art at Belfast and Derry.

Further efforts have been made in the past year to avoid waste of energy on the part of students. Many of them do not realise the best line to follow and spread their attention over ill-related groups of subjects which bear too slowly towards the wished-for end. In several cases general courses, giving the necessary training in as complete a manner as possible, have been offered to students on advantageous terms, and they have not failed to avail themselves of them. There can be no doubt that the introduction of well-balanced courses, instead of the instruction in isolated subjects which is at present so general, will, in the long run, make for greater efficiency, and will also tend to bind the students of any course more closely together and cultivate a beneficial feeling of fellowship amongst them.

#### SECONDARY SCHOOLS.

Eighty Schools in Ulster followed the Department's Programme for Secondary Schools. Of these 33 were Boys' Schools, 28 Girls' Schools, and 19 Mixed Schools. All, except five, were Intermediate Schools, three of the five being Day Trades Preparatory Schools.

Three of the Schools were recognised for the first time, and in these only the First Year Course was taught. The Second Year Course was taken by 75 Schools. The Special Courses followed included all those provided for in the Department's Programme, with the exception of Geology. The following table shows the distribution of the Courses:—

COURSE.		TAUGHT IN
		22 Schools.
Special Course of Physics	.. .. .	29
Chemistry	.. .. .	29
Mechanics	.. .. .	6
Botany	.. .. .	19
Physiology and Hygiene	.. .. .	6
Drawing	.. .. .	20
Special and Auxiliary Courses of Domestic Economy	.. .. .	10
Auxiliary Course of Manual Instruction	.. .. .	8

These figures are very similar to those of the previous year, the only notable alteration being the increase of the Schools taking Botany.

The courses taken by the various types of School continue to be suitable and satisfactory, but it is very remarkable that Manual Instruction should be so much neglected in a District which contains so many important industrial centres. The explanation rests in the fact that the Intermediate Board have not yet given it a place in the School curriculum.

Domestic Economy also has not yet taken its proper place owing to the fact that the smaller Girls' Schools are unable to provide suitable kitchens and qualified teachers.

The standard of work generally showed little variation from that of the previous year; a creditable number of schools earned additional grants for exceptional merit, and the number of cases where it was necessary to reduce grants for inefficiency was very small. At the same time it cannot be said that the best is yet being got from the Schools. Several causes operate against progress. In the first place a number of the best teachers leave annually, and their places are taken by others of less experience, who take time to reach a high standard. In the second place, some teachers, especially those trained in Summer Courses, rest content with what they have learned and take no means to add new knowledge or cultivate in themselves the spirit of inquiry; there results a lack of interest which becomes transferred to the pupils. A third cause is the wrong attitude of mind produced by the prevailing Examination system; teachers who are accustomed to attach abnormal importance to examinations in other subjects than Science find a difficulty in adopting the right attitude of mind in the laboratory.

Slight improvements have been effected in the accommodation for the classes. Two new laboratories were built, and there are now 14 Chemical,



14 Physical and 57 Composite Laboratories, 10 Domestic Economy Kitchens, 10 Workshops and 25 Art Rooms in use in the district. These are generally suitable for the needs of the Schools, and their equipment has been maintained in satisfactory order.

#### PRIMARY SCHOOLS.

There were 10 Primary Schools in Ulster following the Department's Programme of Drawing. In three of these instruction in Woodwork was also given. The efficiency of the instruction may be seen from the fact that five of the Schools obtained the award "Excellent" and four "Good" for Drawing. In Manual Instruction one School did excellent and two good work.

Mr. McCARTHY, *Junior Inspector (South Central District)*, reports:—

#### COUNTY SCHEMES.

The scheme for County Wexford is administered by the County Committee of Agriculture and Technical Instruction, applies only to rural districts, and provides merely for Itinerant Instruction and Girls' Scholarships, whilst the schemes for the other counties of this district are administered by Joint Committees representing both urban and rural districts, and are much more extended in their operations.

The itinerant Manual Instructors are employed in giving instruction in Woodwork and the necessary Technical Drawing. Youths and men of the farming class form the great bulk of the students in rural centres, but masons, apprentice carpenters, blacksmiths and schoolmasters are not infrequently enrolled in the classes, and occasionally a clergyman is found at the bench acquiring a working knowledge of tools and timber.

A Course in Woodwork usually consists of sixty hours' instruction, given in thirty two-hour lessons, and it is usual in rural districts to have an early class for boys over fourteen years of age and a later class for adults. Forty complete courses in this subject were given during the session, and were distributed amongst the various counties as follows:—Kilkenny, 13; Carlow, 9; Wexford, 6; Wicklow, 6; and Kildare, 6. The total is three less than the corresponding total for the previous session, the decrease being due to the impossibility of securing students for an early class in some of the more remote and sparsely populated districts visited by the Instructors. To meet the peculiar circumstances of centres in such areas it is becoming usual to hold three-hour classes on six days a week.

The Itinerant Instructresses are occupied in conducting courses of instruction in Cookery, Needlework and Laundry Work. The Syllabus of the Cookery Course usually includes some instruction in Housewifery and Hygiene and a few lessons in Home Nursing. It is usual to enrol two sets of students in a centre—one for thirty two-hour lessons in Cookery, etc., the other for a combined course of twelve lessons in Laundry Work and eighteen in Needlework. In Kildare and Wicklow, however, there is observable a regrettable tendency to omit Laundry Work altogether from the schemes of lessons in rural centres.

During the session the Instructresses have conducted eighty-seven complete Courses of instruction, which were distributed amongst the various counties as follows:—Kilkenny, 22; Wexford, 22; Carlow, 20; Kildare, 18; Wicklow, 5. The corresponding total for 1908-9 was seventy-six. The two last mentioned counties were mainly responsible for the substantial increase in the amount of instruction—in Kildare more attention was given to the organisation of the work in rural districts than in the preceding session, and in Wicklow an additional Instructress was temporarily employed for a few months towards the close of the session. In Wicklow increased instruction could be provided for rural districts by closer attention to the work of organisation.

The teaching of Domestic Economy subjects in rural centres was in the main satisfactory. It may, however, be well to indicate certain directions in which the manner of conducting the courses might be improved; e.g., the courses do not always open or close on the appointed days; delay in

remedying defects of equipment frequently gives rise to inconvenience; the setting aside of the last day of a course for scullery work only is an objectionable feature of some courses and would be quite unnecessary, if the appearance of the equipment and class-room received more consideration throughout the period of the course; the amounts realised by the sale of cooked dishes under some Instructresses fall considerably below the average, and in many of the courses too much of the students' time is occupied in writing out recipes and notes of method. This last defect can be remedied by making use of some of the cheap and serviceable little hand-books on Domestic Economy subjects which have been put on the market in recent years, and, when necessary, by supplying students with supplementary notes duplicated by the cyclostyle or other suitable means. It may also be mentioned that some Instructresses have exhibited an indifference to those conditions of the schemes which refer to the admission of National School pupils to classes conducted under Technical Instruction Committees.

Much activity is still being displayed in opening up new centres for the visits of the Teachers. During the session under review instruction was given in thirty-one new centres distributed amongst the several counties as follows:—Kilkenny, 9; Kildare, 8; Wexford, 7; Carlow, 4; Wicklow, 2. These numbers indicate a considerable improvement in this important work in Kildare, while, at the same time, they emphasize the fact that the necessity for extending the benefits of the scheme to places where they are most required is a matter which still fails to receive the attention which it merits in Wicklow. In Wexford the opening up of new centres of instruction has been greatly facilitated during recent seasons by the efforts so successfully made in many localities to establish Village Halls. These halls invariably afford good accommodation for technical classes and so remove one of the most serious obstacles to the rapid extension of the operations of schemes in rural districts. It is a matter for regret that the class-rooms used in many new centres were not as clean or as well-lighted and ventilated as they would have been had the Secretaries and Teachers given timely and careful consideration to their preparations.

Junior Scholarship Schemes for boys coming from primary schools were in operation in Kilkenny and Carlow. The Kilkenny Scholarships are tenable only at the Day Trades Preparatory School, and it is noteworthy that, whilst few boys from the urban district find their way into the school, there is very keen competition for the scholarships amongst boys from rural districts. Such boys invariably make very satisfactory students. The Kilkenny scheme also provides for the award of Apprenticeship Scholarships of £10 each to boys who have been distinguished for their ability and application throughout their three year course at the Day Trades Preparatory School. The Carlow Junior Scholarships are tenable at approved Secondary Schools. During the session £225 was expended by the Carlow Joint Committee in providing six First Year and twenty Second Year Scholarships.

Domestic Economy Scholarships for girls were awarded under the Wexford and Carlow schemes. The seven Scholarships awarded under the Wexford scheme were all held in the newly-opened School of Domestic Training at Kilmore, in the south of the county. Of ten scholarships awarded by the Carlow Committee nine were taken up, and these were held at the approved School in Stendally.

Two small industries—the Nags Rug-making Factory and the Maynooth Crochet class—continued to receive teaching grants through the Kildare scheme. The normal funds of this scheme were augmented by a special subsidy for this and other purposes, but notwithstanding this they have been unable to bear the strain.

The Technical Schools in Wicklow, Nags and Athy have been specially built or adapted, and permanently equipped for the work of Technical Instruction. In Arklow during the session classes were held in three buildings widely separated, unprovided with good approaches and affording only moderate accommodation. To remedy this unsatisfactory state of things it has been decided to build a suitable school in Arklow, and the Wicklow County Council have increased their annual contribution to the scheme to enable this to be done. In Kilkenny the classes continue to find accommodation in three separate buildings.

The need for a school capable of providing accommodation for all the evening classes has been felt for a long time, and during recent sessions the inadequacy of the laboratory and the inconvenience of the class-room accommodation for the work of the Day Trades Preparatory School has been only too evident. The Committee have for some time been seeking to obtain possession of the local Model School with the intention of converting it into a Technical School, but it is not at all certain that such success as they can hope for would be of much advantage to the scheme. Meanwhile the inadequacy of the existing accommodation is ever increasingly felt as the work of the Day Trades Preparatory School develops. The Carlow Joint Committee have hitherto made no effort to secure the right of exclusive use of class-rooms in the urban district. In such circumstances it is not possible that satisfactory progress can be made in developing a system of technical instruction suited to the needs of a town like Carlow.

In all the Technical Schools already mentioned classes have been conducted under the regulations of the Programme. In Carlow, which suffers from the want of an efficient and responsible organiser, the only effort made to systematise the instruction was a feeble attempt to organise a course in Commercial Subjects. In Nass and Athy a small number of students followed specialised courses in Commercial Subjects, but in other directions little good work was accomplished in these schools. In Kilkenny specialised courses in Art and Domestic Economy subjects flourished, and a Preparatory course limited to mistresses was successful; but weak spots in the school were indicated by the comparatively small number of male students in attendance, the lack of qualified students in the Engineering Course, and the absence from the curriculum of an organised course in Commercial Subjects. In Wexford and Arklow a fair proportion of the students followed organised courses of study in Domestic Economy, Art, Building Trades and Engineering subjects. An important factor in the success of these two schools is the attention given session by session to the organisation and teaching of the Preparatory course.

#### URBAN DISTRICT SCHOOLS.

Independent urban schemes are in operation in Wexford, Bray, New Ross and Ennisceorthy. The schools in Wexford and Bray consist of adapted buildings with extensions in corrugated iron which provide accommodation for Art and Woodwork classes. In these centres the premises are adequate and fairly convenient. In New Ross and Ennisceorthy suitable schools are being erected and will be ready for occupation early in the coming session.

In Wexford organised courses in Art and Commercial Subjects have been fairly successful, but the course in Engineering attracted comparatively few students. The absence from the curriculum of an organised Preparatory Course continues to react unfavourably on the development and efficiency of the school as a whole, whilst the restricted demand for instruction in Domestic Economy has become a subject of reproach.

In the Bray school much attention has been given during recent sessions to the working up of a large Preparatory Course, and of a fine year course in Commercial Subjects—with fairly satisfactory results; but in other directions the work being done is not of great importance. The Secretary of the Committee who organises the classes is not a whole-time officer.

The staff of the New Ross School consists of a Principal and Domestic Economy Instructress, who are whole time officers, and a Teacher of Preparatory and Commercial subjects engaged for evening work only. By arrangement the Ennisceorthy Committee have secured the services of the same staff to conduct classes in Ennisceorthy also. There has been a marked improvement in the organisation of the work carried on in these two towns during the session, and a fair number of qualified students have attended instruction in the Building trades, Art and Commercial Courses. There is, however, pressing need for additional Teachers for the Preparatory and Commercial classes.

## SECONDARY SCHOOLS.

Thirty-three schools in this district, all of them Intermediate schools, followed the Department's Programme for Day Secondary Schools. Of these twenty were Boys', eleven were Girls', and two were Mixed Schools. The Preliminary Course in Science and Drawing was taken in all the schools. Manual Instruction was taught as a first year subject in thirteen Boys' Schools, and as a second year subject in eight. The auxiliary Course in Domestic Economy was taught as a first year subject in five Girls' Schools, and as a second year subject in four. Special Courses were taken in all the Girls' Schools and in nineteen Boys' Schools. In all the Girls' Schools, except one, the curriculum included two or three special course subjects, whilst in all the Boys' Schools, except three, only one such subject was taken. The number of schools taking up each of the special courses is shown in the following list:

	Boys' and Mixed Schools		Girls' Schools	
	3rd year	4th year	3rd year	4th year
Chemistry . . . .	11	3	1	—
Physics . . . . .	4	1	—	—
Mechanical Science . .	2	—	—	—
Drawing . . . . .	3	—	6	3
Domestic Economy . .	—	—	11	6
Physiology and Hygiene	—	—	5	4
Botany . . . . .	—	—	2	1

The teaching in the Introductory Courses in Science was generally satisfactory in Girls' Schools. In Boys' Schools the teaching, though in the main satisfactory, was less successful than in the Girls' Schools, and in several instances fell much below the normal standard. In some schools where this occurred the low state of efficiency was partly due to defective organisation which cast on the Teachers a burden greater than they could bear. For example, in schools having primary departments attached there was a tendency to place pupils in the Introductory Physics Course who were not fit to take it with advantage; and in the few schools in which concurrent instruction in the Introductory and Special Courses in Chemistry was permitted the pupils of the former course did not receive the attention to which they were entitled. Defective organisation was not, however, the sole, nor even the main, cause of the low standard of attainments in the schools referred to—defects of teaching were to a much greater degree responsible for the weakness. It was usually found in the less satisfactory classes that the Teachers had not given sufficient attention to the preparation of lessons, the discussion of difficulties, the revision of note-books, or the keeping of the laboratory and equipment in good order. It is not difficult to trace some connection between these defects and the frequent changes in the teaching staff from which some schools suffer.

Drawing of the Preliminary Course was on the whole satisfactorily taught. The progress is somewhat more rapid in Girls' Schools than in Boys' Schools, chiefly because it is usual in the former to give to this subject two lessons each week, whilst in the latter the practice is rather to give it only one lesson weekly.

The first and second year courses in Manual Instruction and Domestic Economy were invariably well taught.

Chemistry as a special course subject has found much favour in Boys' Schools and especially in the few which find the maintenance of a third year course somewhat onerous. In the main the subject is taught with a fair measure of success, but where expediency and a mistaken economy rather than educational reasons have led to its selection the teaching is rarely enthusiastic or successful.

The standard of efficiency in the teaching of Physics and Mechanical Science is not high, but it is rising season by season.

The special course in Drawing is satisfactorily taught in Boys' Schools and excellently taught in Girls' Schools.

The special courses peculiar to Girls' Schools are Domestic Economy, in Domestic Economy, earnest, painstaking and successful in Physiology, Physiology and Hygiene, and Botany. The teaching is very satisfactory and Hygiene, and without any outstanding defect in Botany.

#### PRIMARY SCHOOLS.

Examinations in Drawing were conducted in the primary departments of three Girls' Schools and twelve Boys' Schools.

Of these fifteen schools, seven presented pupils in Standard V., two in Standard VI., and two in Standard VII.

In the Girls' Schools the numbers examined were comparatively small, but the results were in every way excellent. Of the Boys' Schools three were classed as Excellent, seven as Good, and two as Fair. This classification is indicative of a decrease in the efficiency of the instruction as compared with that for the preceding season. The falling-off was most marked in the Mechanical Drawing of Standards III. and IV., and the Model Drawing of Standard V. Some improvement was noticeable in the Geometrical Drawing of Standard V., and in the oral answering of all the Standards above the second. In a third of the schools the pupils of Standard I. worked on paper.

#### GENERAL.

A new Residential School of Domestic Training was opened this season at Kilmore in County Wexford, by the nuns of the Order of St. John of God. The pupils included seven girls holding scholarships under the County Wexford Scheme, and five holding scholarships under the County Dublin Scheme. These girls were comfortably housed and satisfactorily taught the various subjects of the approved curriculum.

MR. MCGINN *Junior Inspector* (West Central District), reports:—

#### COUNTY SCHEMES.

The West-Central District comprises the counties of Clare, Galway, Lestrin, Longford, Mayo, Roscommon, Sligo and Westmeath. All had schemes of Technical Instruction in operation. Thirteen teachers were employed to give instruction in Domestic Economy subjects, and the courses generally were of six weeks' duration. The accommodation available was usually unsuitable, but the most was made of existing conditions. On the whole, the classes were attended by a good type of pupil, the instruction, which included all branches of Housecraft, was sound and practical, and the results achieved were good. Many of the courses were given at rural centres in remote localities where, owing to the scarcity of vegetables, much of the value of the instruction in Cookery was lost to the pupils. Until the "Cabbage Plots" are changed into "Vegetable Gardens," little variety can be introduced into the dietary of the poorer classes. Committees might well co-ordinate the work of the Horticultural and Domestic Economy teachers and utilise labourers' cottages to give practical illustrations of how the poor man's home might, with little increase in expenditure, be made a more inviting resting place for the wage earners of the family, and his garden an unfailing source of wholesome and nutritious food. Increased attention is being paid to instruction in the essentials of a healthy existence, simple home remedies, and the care of the young, aged and sick. It is to be regretted, however, that in one county only are the services of a specially qualified instructress devoted to this class of teaching. A trained nurse qualified in Hygiene, capable of giving simple, practical lessons, and willing to be the friend in the home as well as the teacher in the class-room, should be on the staff of every County Committee.

Each of the counties made provision for instruction in Drawing and Woodwork. The courses were of some months' duration, were given mainly at rural centres, and were attended chiefly by farm hands. Despite the inconvenience, inadequate, and even unsanitary nature of the only accommodation available, and the long distances to be walked by the pupils, often along bad roads in inclement weather after their day's toil, excellent results continue to be achieved. In town centres the services of manual instructors are not so much in request.

Secondary School Scholarships were granted by the Galway, Mayo and Longford Committees, and the scholarship holders made satisfactory progress in their studies, but few of them inclined to industrial careers or further technical training.

Four County Committees made provision for the payment of capitation grants to the managers of girls' classes in industrial and domestic subjects. Only one school took up Domestic Subjects; it did excellent work. Seven gave instruction in Lacemaking, but not more than three of these can be regarded as laying the foundations of industries. Two gave instruction in Machine Knitting and at one of these a healthy well-managed industry exists. Six lace teachers were employed by County Committees and assigned to centres where an attendance could be secured. With one exception little local interest was taken in the success of their classes and the prospect of establishing industries at the centres is negligible or remote. In this connection Committees should bear in mind that industries are unlikely to succeed without local co-operation, and that the persons selected as teachers should be not alone expert workers but good organisers possessed of tact and business capacity.

In Clare a specially qualified teacher of Commercial Subjects held classes at four pence; they were well attended by a desirable type of pupil and made creditable progress.

At Mullingar a small Technical School was maintained in the uninviting premises of the old gaol, but except in the Preparatory and Woodworking classes the attendances were small.

The Meate Residential School of Domestic Economy added Gardening to its curriculum and provided an admirable training in every branch of Housecraft, but the instruction was availed of only by girls awarded Scholarships under the Westmeath County Scheme.

#### URBAN DISTRICT SCHEMES.

The Urban Districts of Athlone, Galway and Sligo maintained schools on the same lines as last year. At Sligo the school premises are adequate; at Galway they are congested and in bad repair, and at Athlone they are unsuitable, except for Woodwork. Except at Sligo, where the numbers following organised courses of instruction increased, and the efficiency of the Commercial instruction reached a high standard, there was little change from the preceding session in the curricula of the schools or the progress of the pupils. The pupils attending the Sligo Day Trades Preparatory School made fairly satisfactory progress in a well-designed course especially adapted to fit them for industrial careers, but the majority of them passed on to employment before the completion of a two years' course. The number of pupils availing of the school is less than it should be, and the low standard of general education of the pupils at the time of entering materially hinders their progress.

Seven Urban Districts participated in the advantages of schemes administered by joint committees of their counties. Only one of them, however, had a permanent Technical School, and that was discontinued during the session by the death of the headmaster. The Urban District of Ballina had no scheme in operation, and at Castlebar and Westport instruction was practically confined to Lacemaking classes.

#### SECONDARY SCHOOLS.

Of the twenty-seven secondary schools in this district which have adopted the Department's programme twenty-one are attended by boys only, and six by girls only. With three exceptions they make provision for instruction in Special Courses. Thirteen of the boys' schools have Manual Instruction rooms

attached, but two of these schools have ceased to teach the subject owing to the inadequate nature of the grants available; three other schools, however, provided instruction for their pupils at extern workshops. The girls' schools are all provided with good Domestic Economy rooms, and the pupils attending them have reached a high standard in this most important branch of a girl's education. The laboratories, kitchens and workrooms are now very satisfactorily kept, the aims of Science Teaching are more correctly appreciated, less importance is attached to memory work; habits of self-reliance are inculcated, and on the whole the spirit of inquiry is developed and the pupils are trained to think for themselves. Sufficient time and thought are not yet given to class and laboratory preparation, and note-book records are not as promptly and carefully revised as they should be. Except in a few schools where pupils, the standard of whose general education is low, are admitted to the First Year Course, the progress made is more uniform than in previous years and may be considered good. Further improvement has been effected in the desk accommodation provided for instruction in Drawing. Schemes of work are more carefully considered and systematically graded, and the time devoted to the subject and the crowded state of the curriculum considered, the progress made is good.

#### PRIMARY SCHOOLS.

Of the schools taking Drawing only three provided instruction beyond the Fourth Standard. Two of these received the award, "Excellent," and one "Good." In all very good progress has been made at ruler work and scale drawing, and very fair progress at freehand. Until the number of pupils receiving simultaneous instruction under each teacher is diminished and improvement effected in the style of desk used, a higher standard of efficiency can scarcely be attained. Provision for instruction in Woodwork was made in the two Industrial Schools in the district; the workrooms were well kept and the teaching was satisfactory.

Miss ANDERSON (*Inspector of Home Industries*), reports.—

#### LACEMAKING AND CROCHET.

The national mourning for the King caused a partial depression in the Irish Lace Industry, and thus necessarily affected the receipts of many centres during the latter part of the session. The branches particularly affected were Limerick Lacemaking, Carrickmacross Lacemaking, and Raised Crochet. Needlepoint Lace and Clones Crochet were unaffected by this temporary depression. This may be accounted for by the facts (1) that orders for Needlepoint Lace have to be booked many months in advance, and (2) that the demand for Clones Crochet comes largely from America.

Some fine examples of Lacemaking in Needlepoint, Limerick and Carrickmacross work have been produced at established centres during the year, but no extension of these industries under County Schemes has taken place in the Session just concluded.

Crochet maintains its position as the most important and most widely distributed of our home industries. Although there has been some fluctuation in the demand for raised crochet during the past Session, the demand for the lighter varieties is undiminished, and it frequently exceeds the supply.

It may be noted that centres engaged in the production of fine Clones Crochet have been fully employed, and they have sometimes been obliged to decline orders. Of course this statement applies only to first-rate work and not to inferior grades of Crochet.

Crochet point maintains its popularity. As the work is in much request and the supply inadequate, steps were taken to extend the industry into new districts by a special course of instruction at the Summer Course, 1910. Some successful experiments have been carried into effect in these centres.

Encouraging progress in technique of Crochet work may be reported during the past Session; the general standard of the work is being steadily raised.

Some advance may also be noted in design and the ornamental arrangement of details—thanks chiefly to the instruction of teachers at the Summer Course—but the artistic side of the industry will need more general attention if we are to maintain our market against the increasing competition from continental centres.

Comparison of the average Irish Crochet with continental work shows that it is artistic design rather than superior technique that makes foreign competition so formidable.

Another aspect of foreign competition demands serious attention. This is the adoption of Irish patterns and Irish motifs—such as the rose, shamrock, etc., by the continental worker. This practice readily lends itself to fraud—especially where purchasers are inexperienced—and the importation and sale of such work in Ireland must be closely watched in the interests of the National Crochet industry.

#### SPRIGGING.

No extension of the Sprigging Industry under County Schemes has taken place in the past Session. Well organised districts such as Balloosh, Rathadog, Drombalogue, etc., have continued to produce good work, and steady employment has been maintained by the workers. Efforts to develop and organise the Sprigging Industry in E. Fermanagh have been less successful, and re-organisation will be necessary before satisfactory results can be obtained. Work in Cloghan (Co. Donegal), also proved disappointing, chiefly owing to the introduction of a Knitting Industry in the village, which absorbed most of the local workers.

The Sprigging Industry is widely extended through S. Donegal; but the management is largely in the hands of local shopkeepers, who secure agencies from Belfast firms. It is suggested that the organisation and development of this existing industry would be of more benefit to the country than the formation of new Crochet classes in Sprigging districts, as such classes cannot develop into important and productive industries, and usually end in failure. Needless to say, efficient instruction and sound management are essential to the success of such a scheme.

#### PLAIN NEEDLEWORK.—HOME SEWING.

This work is educational rather than commercial. Girls are trained in cutting-out and fitting; making and mending; shirtmaking generally forms an important part of the Course. The garments produced are mainly intended for home use, or for charitable distribution. In some instances pupils have gone direct from these classes to situations with dressmakers as "improvers," and orders are occasionally extended for local dispers; but the main object of the instruction is to train girls in household sewing, and in habits of thrift and economy. Efficiently conducted, these classes are of much service to a district.

#### BUSINESS METHODS.

The educational standard of Industrial Teachers is being gradually raised throughout the country. This is largely due to the instruction received during the Summer Courses in Cork, and to the systematic training afforded by the Training School in Renskillen. As a result, general improvement may be reported in the system of keeping the accounts, and of conducting the business side of the industries. There is still considerable room for improvement in many centres, but the progress made is distinctly encouraging.

The deduction of a percentage from sales, to defray working expenses of industries, continues to work satisfactorily in Northern centres. The general introduction of this system into other provinces is to be desired. In districts where competition from local agencies is acute, the payment of ready money to workers is a matter of much importance.

Itinerant instruction in industries is now limited to Co. Cork. The adoption of a very simple and progressive system of teaching is needed where short courses are given; otherwise the instruction is wasted. It is satisfactory to note that the fact is now recognised, and that recent instruction has been on sound and practical lines: the results already obtained give good promise for the future.



## THE TRAINING OF TEACHERS.

The summer courses of instruction to teachers, held in July and August, provided for instruction in experimental science (physics, chemistry, mechanical science, botany and physiology and hygiene), laboratory arts, drawing and modelling, domestic economy, manual instruction (woodwork), practical mathematics and mechanics, hand-railing, office routine and business methods, hygiene and sick nursing, housewifery, and rural science (including school gardening). A special course of instruction for teachers of crochet-work, embroidery and springing was also held.

The institutions at which the courses were conducted were:—The Royal College of Science, Dublin; the Metropolitan School of Art, Dublin; the Irish Training School of Domestic Economy, Stillorgan, Co. Dublin; the Department's Industrial Annex, Grand Canal Bank, Dublin; the Municipal Technical Institute, Belfast; the City of Dublin Technical Schools; the Christian Brothers' Schools, North Richmond Street, Dublin; the Municipal Technical School and School Garden, Kingstown; the Albert Agricultural College, Glasnevin; and the Crawford Municipal Technical Institute, Cork. Special centres were arranged for members of enclosed religious orders, for whom courses of instruction in experimental science, drawing and modelling, and domestic economy were provided.

The courses were attended by 621 teacher-students, of whom 478 received certificates of satisfactory attendance and progress; the number attending for instruction in the various subjects being:—Experimental science, 259; laboratory arts, 19; drawing and modelling, 117; domestic economy, 41; manual instruction (woodwork), 21; practical mathematics and mechanics, 29; hand-railing, 10; office routine and business methods, 19; hygiene and sick nursing, 19; housewifery, 19; rural science (including school gardening), 30; crochet-work, etc., 38.

The staff of instructors numbered 88, the following being the staffs engaged for the various courses:—

*For Experimental Science and Laboratory Arts:*—Professor W. Brown, B.Sc.; Professor T. Johnson, B.Sc., F.L.S.; Professor J. A. McClelland, B.Sc., F.R.S.; Messrs. J. Adams, M.A.; R. G. Allen, B.Sc., A.R.C.S.C.I., A.I.E.E.; P. E. Belas, A.R.C.S.C.I.; R. W. Bingham, B.A.; J. Bayley Butler, M.A., M.B.; J. A. Clarke, B.A., M.B.; J. Comerton, B.A.; G. Ebrill, B.A.; F. E. W. Hackett, M.A., B.Sc., Ph.D.; T. Alexander W. Hill, B.Sc.; A. S. M. Imrie, M.A., B.Sc.; W. J. Lyons, B.A., A.R.C.S. (Lond.); R. Macdonald, M.A., B.Sc.; Brice Moore, B.A., LL.B.; A. O'Farrelly, M.A.; B. O'Shaughnessy, A.R.C.S. (Lond.), F.I.C.; J. H. Pollok, B.Sc.; J. Taylor, M.A., A.R.C.S.C.I.; and G. H. Woollatt, Ph.D., F.I.C.; and Messrs. H. M. Atkinson, B.Sc., Ph.D.; G. H. Chatwynd; J. Enright, B.A.; B. G. Fagan, A.R.C.S.C.I.; J. Ivon Graham, A.R.C.S.C.I.; G. Hanlon, M.A.; A. T. Henley; E. Holden; W. D. Horgan, B.A.; J. Ingram, B.Sc., A.R.C.S.C.I.; W. R. Johnston, A.R.C.S.C.I.; Otway H. Little, A.R.C.S.C.I.; R. V. Manning, A.R.C.S.C.I.; H. W. Moss; E. Moynihan, A.R.C.S.C.I.;

M. J. O'Connor; P. Rocks, A.R.C.S.C.I.; F. W. Warwick, B.A., B.E., A.R.C.S.C.I.; O. A. Watson, A.R.C.S.C.I.

*For Drawing and Modelling*:—Mr. J. Ward, A.R.C.A. (Lond.); Messrs. H. C. Charde; J. W. Frosth, A.R.C.A. (Lond.); J. Golden; F. Luke, A.R.C.A. (Lond.); G. G. Lynes; W. M. A. Orpen, A.R.A., B.R.A.; A. Power; O. Sheppard, B.R.A.; Mrs. D. Barden; Misses M. Crilley; E. Emerson; K. Fox; A. Jacob; E. Luke; G. Scott.

*For Domestic Economy, Hygiene and Sick Nursing, and Housewifery*:—Misses L. A. Baker, M.A., B.S.; K. A. Corley; O. Gentleman; M. Kerr Green; B. Hamilton, B.A.; M. J. Harding; T. M. Kelly; B. A. McVeigh; C. Millar; M. Vaughan; J. F. E. Walsh, B.A.; K. E. Warren.

*For Manual Instruction (Woodwork), Handrailing, and Practical Mathematics and Mechanics*:—Messrs. H. O. Armstrong; W. Davidson; J. G. Edwards, A.M.T.M.E.; P. F. Gillies, B.Sc.; W. B. Jamison; G. H. Smith.

*For Office Routine and Business Methods*:—Messrs. W. Boyd Cooper, F.C.I.; E. Daly; W. Scott.

*For Rural Science (including School Gardening)*:—Mr. D. Houston, F.L.S.; Mr. G. O. Sherrard, A.R.C.S.C.I.; Miss E. Alderton.

*For Crochet Work, Embroidery and Sprigging*:—Mr. W. A. Mulligan, A.R.C.A. (Lond.); Mrs. K. Breton; Misses N. Galvin; M. Maguire; S. A. O'Neill; E. Percival; S. A. Reynolds.

The number of teachers who have been admitted to courses in experimental science, laboratory arts, drawing and modelling, manual instruction (woodwork), and domestic economy, and the numbers of those whose attendance and progress have been satisfactory, are given in the following tables:—

### EXPERIMENTAL SCIENCE.

#### PRELIMINARY COURSE.

YEAR.	First Year Syllabus.		Second Year Syllabus.	
	Total Number of Teachers who attended the Course.	Number of Teachers who attended the Course satisfactorily.	Total Number of Teachers who attended the Course.	Number of Teachers who attended the Course satisfactorily.
1901.	196	173	—	—
1902.	166	114	160	110
1903.	164	103	105	87
1904.	129	68	128	106
1905.	141	72	91	57
1906.	131	49	90	53
1907.	41	16	90	84
1908.	91	54	16	14
1909.	22	9	67	52
1910.	118	47	13	11

## SPECIAL COURSE IN PHYSICS.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .	48	44	—	—
1904, .	47	33	35	24
1905, .	51	30	55	43
1906, .	30	16	48	34
1907, .	27	14	35	23
1908, .	25	14	33	24
1909, .	22	9	21	19
1910, .	25	13	11	6

## SPECIAL COURSE IN CHEMISTRY.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .	60	65	—	—
1904, .	43	31	55	40
1905, .	43	29	70	55
1906, .	47	43	44	40
1907, .	35	29	50	37
1908, .	41	26	40	28
1909, .	30	13	42	34
1910, .	37	26	24	9

## SPECIAL COURSE IN MECHANICAL SCIENCE.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .	6	6	—	—
1904, .	1	1	5	5
1905, .	10	7	1	1
1906, .	9	8	4	3
1907, .	8	7	8	5
1908, .	5	3	6	4
1909, .	7	4	1	—
1910, .	7	5	6	4

## SPECIAL COURSE IN BOTANY.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .	14	10	—	—
1904, .	8	7	5	5
1905, .	4	2	9	9
1906, .	11	9	8	8
1907, .	10	9	13	12
1908, .	5	5	11	9
1909, .	4	1	12	11
1910, .	3	2	7	7

## SPECIAL COURSE IN PHYSIOLOGY AND HYGIENE.

YEAR.	Third Year Syllabus.		Fourth Year Syllabus.	
	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.	Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903, .	12	10	—	—
1904, .	11	11	7	7
1905, .	16	15	14	14
1906, .	12	12	20	20
1907, .	21	20	15	15
1908, .	12	11	15	14
1909, .	4	4	14	11
1910, .	—	—	8	7

## COURSE IN LABORATORY ARTS.

YEAR.	Total Number of Teachers who attended the Courses.		Number of Teachers who attended the Courses satisfactorily.
1906, ...	...	39	38
1907, ...	...	42	42
1908, ...	...	38	38
1909, ...	...	31	31
1910, ...	...	19	19

## DRAWING AND MODELLING.

YEAR.			Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1901,	...	...	80	69
1902,	...	...	109	106
1903,	...	...	144	121
1904,	...	...	141	138
1905,	...	...	142	140
1906,	...	...	121	121
1907,	...	...	142	139
1908,	...	...	136	136
1909,	...	...	113	112
1910,	...	...	117	117

## MANUAL INSTRUCTION (WOODWORK).

YEAR.			Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1902,	...	...	20	13
1903,	...	...	15	9
1904,	...	...	9	8
1905,	...	...	18	12
1906,	...	...	21	13
1907,	...	...	21	19
1908,	...	...	20	16
1909,	...	...	20	15
1910,	...	...	21	18

## DOMESTIC ECONOMY.

YEAR.			Total Number of Teachers who attended the Courses.	Number of Teachers who attended the Courses satisfactorily.
1903,	...	...	26	15
1904,	...	...	78	64
1905,	...	...	83	64
1906,	...	...	80	65
1907,	...	...	81	74
1908,	...	...	58	45
1909,	...	...	56	43
1910,	...	...	41	33

Provision is made at the Royal College of Science for the training of teachers of Experimental Science, a special group of subjects being arranged for those who wish to take up this branch of the teaching profession. Teacher-ships-in-training, tenable at the Royal College of Science and at the Metropolitan School of Art, are offered for competition amongst science and art students. Particulars of the competitions will be found in the Appendices, pages 314-318.

The Department have made provision for a supply of teachers of commercial subjects who will be capable of giving instruction in some of the higher branches. Four Scholarships were awarded in 1904, two in 1905, six in 1906, three in 1907, and eight in 1910. Fifteen scholars have completed a two years' course of training at the London School of Economics (University of London), and have been engaged in teaching in the country under the Department's Schemes. Of these, however, three are now otherwise employed.

In order to provide for the further training of Manual Instructors, otherwise than by means of Summer Courses, the Department have offered facilities to enable Instructors to attend special Saturday Classes at convenient centres. Two such classes were held during the session at Dublin and Belfast. These classes were attended by nineteen Instructors. The subjects of instruction included Practical Plane and Solid Geometry, Practical Mathematics and Practical Mechanics.

The work of the Irish Training School of Domestic Economy is now being wholly carried on in the new premises at St. Kevin's Park, Kilmacud, Stillorgan, Co. Dublin, the courses of training at the School in Kildare Street being finished in June, 1910. The course of training for teachers of Domestic Economy extends over two years, but only those students are selected therefor who have most satisfactorily followed the course in Household Management, which will, in future, extend over one whole session.

A report on the School for the session is printed at page 126, from which it will be seen that, during the session, fourteen students secured the Departments' Diploma as Domestic Economy Instructresses.

Classes for the training of National School Teachers in Elementary Experimental Science were conducted in the Technical Schools at Ballymena, Ballymoney, Banbridge, Belfast, Kingstown, Larne, Limerick, Londonderry, Portadown, and Waterford.

The following table shows the number of such classes which have been held, and the number of teacher-students in attendance:—

Session.	No. of Centres.	No. of Teachers presented for examination.	No. of Teachers who received Certificates of satisfactory attendance and progress.			
			First Year Course.	Second Year Course.	Third Year Course (Rural Economy).	Total.
1903-4, .	7	53	31	—	—	31
1904-5, .	5	32	22	—	—	22
1905-6, .	7	93	40	15	—	55
1906-7, .	9	110	31	39	—	70
1907-8, .	13	124	17	65	—	82
1908-9, .	11	113	19	42	6	67
1909-10, .	19	88	21	41	7	69

Special Summer Courses in Rural Science (including School Gardening) were held by the Department during the month of August. Thirty National School Teachers were admitted to these courses, of whom twenty-five received certificates of satisfactory attendance and progress.

There was a great increase in the number of classes conducted for the training of teachers in Domestic Economy, classes being held in the following Technical Schools:—Ballisbridge (Co. Dublin), Ballymena, Ballymoney, Banbridge, Belfast, Coleraine, Dundalk, Kilkenny, Kingstown, Limavady, Limerick, Londonderry, Magherafelt, Newry, Portadown, Sligo, Tralee, and Waterford. Four hundred and twenty-two teachers were presented for examination, of whom three hundred and sixty-seven secured certificates of satisfactory attendance and progress, five of these being in the second year syllabus.

Special Drawing Classes for National School Teachers were conducted in the Technical Schools in Coleraine, Limerick, and Portadown. These were attended by twenty-three teacher-students, but only seven were presented for examination and only one qualified for the certificate of satisfactory attendance and progress.

#### CENTRAL INSTITUTIONS.

The Reports of the Dean and Council and the Registrar of the ROYAL COLLEGE OF SCIENCE AND METROPOLITAN SCHOOL OF ART. page 391 of the Appendices, and the Report of the Headmaster of the Metropolitan School of Art at page 404.

All of the fifteen students whose names remained on the roll at the close of the previous session re-joined on the re-opening of the school on the 10th August, 1909. Of these, fourteen completed their training during the session and secured the Department's Diploma. The session closed on the 1st June, and the whole work of the school was then transferred to the new premises at St. Kevin's Park, Stillorgan, Co. Dublin, which were opened on the 27th January, 1909, arrangements being made for the one student remaining on the books of the Kildare Street School to complete her training in the new school.

Three Domestic Economy Teachers, not fully certificated, were admitted for training in separate subjects. Of these one secured certificates in Laundrywork and Housewifery, and a second a certificate in Dressmaking and Home Sewing, the third failed to reach the standard required by the examiners in Laundrywork.

The eleven students of the Household Management course, which concluded on the 25th June, 1909, who were selected for training as teachers, re-joined on the re-opening of the School on the 10th August, and twelve students were admitted to the Household Management Course. At the close of the term in December, certificates of having satisfactorily followed the course were awarded to the twelve students of the Household Management course, and six of these were selected to follow the course of training for teachers.

On the re-opening of the school, on the 11th January, after the winter recess, twelve new students were admitted to the Household Management course, one of these left the school during the term, and one failed to attain the standard required for the award of a certificate. Of the others two were selected for training as teachers.

At the close of the session, on the 1st June, the names of nineteen students remained on the roll of the school.

Under the new regulations, which came into force at the beginning of the session 1910-11, the Household Management course is extended so as to cover two terms, or a school year—the object of the extended course being to provide such a training for those students, who may not be selected for further training as teachers, as will enable them to secure appointments as matrons of large institutions, manageresses of hotels, etc.

The following classes for extern students were held during the session, and were attended by the number of students indicated:—

*Kildare Street.*

Adults' Class	...	Dressmaking	12
Children's Class	...	Laundry Work	14
" "	...	Housewifery	13

*St. Kevin's Park.*

Children's Class	...	Cookery	34
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Twenty-nine pupils attended the Killarney School of Housewifery during the academic year 1909-10. Of these, two left owing to illness, and seven remained on at the close of the session, not having completed their training. Situations, with wages ranging from £12 to £20 per annum, were secured for fifteen of the pupils who completed their training, the other five electing to return to their homes.

#### SCHOLARSHIPS.

The following scholarships were awarded during the year:—

- (1.) Scholarships from the Primary to the Secondary School (Junior Scholarships).
- (2.) Scholarships at Day Trades Preparatory Schools.
- (3.) Scholarships at Residential Schools of Domestic Training.
- (4.) Local Exhibitions.
- (5.) Science and Technological Scholarships and Teacherships-in-Training at the Royal College of Science (Senior Science Scholarships).
- (6.) Teacherships-in-Training at the Metropolitan School of Art (Senior Art Scholarships).
- (7.) Industrial Scholarships.
- (8.) Commercial scholarships.
- (9.) Crochet-work and Sprigging Scholarships.

On the results of the examination held on the 25th June, 1910, sixty-four Junior Scholarships have been awarded, thirty Scholarships held during the session 1909-10 have been renewed for a second year, one for a third year, and two for a fourth year. There are, therefore, at present 97 Scholarship holders, the number of Scholarships awarded by each Committee being as follows:—

JUNIOR SCHOLARSHIPS.	County Carlow, 24; County Galway, 31; County Kerry, 3; County Limerick, 9; County Longford, 8; County Mayo, 5; Queen's County, 10; Tipperary Urban and Rural Districts, 2; County Tipperary (North Riding), 4; County Waterford, 1.
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The Scholarships vary in value from £5 to £15, according to the remoteness of the pupil's home from a Secondary School; they must be held at an approved Secondary School, and are renewable for a second, and, in some cases, for a third or fourth year, on a satisfactory report from the Department's Inspector on the conduct and progress of the pupil.

For general conditions of the Scheme under which these Scholarships were awarded, see Queen's County Scholarship Scheme at page 293 of the Annual Report for 1908-9.

SCHOLARSHIPS AT DAY TRADES PREPARATORY SCHOOLS.	These Scholarships, of which 306 were granted in 1910, as a rule, cover only tuition, or tuition and the necessary books and instruments, but eighty-three scholars received, in addition, sums varying from £1 to £15 as maintenance allowance or as grants towards the cost of travelling.
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These Scholarships are, in some cases, renewed for a second and for a third year if the progress made by the scholar is satisfactory. In other cases second and third year Scholarships are awarded to the pupils generally upon the results of the work of the previous session.

School.	First Year Scholars.	Second Year Scholars.	Third. Year Scholars.	Totals.
Ballymena D.T.P.S.	6	—	—	6
Belfast Christian Brothers' D.T.P.S.	13	18	16	47
Belfast Municipal D.T.P.S.	18	30	7	55
Bladrock D.T.P.S.	14	5	7	26
Chanel D.T.P.S.	13	10	—	23
Kilkenny D.T.P.S.	2	6	10	18
Londonderry D.T.P.S.	6	—	—	6
Portadown D.T.P.S.	3	9	4	16
Ringsend, Pembroke D.T.P.S.	40	19	10	69
Sligo D.T.P.S.	11	6	—	17
Waterford D.T.P.S.	15	*8	—	23
Totals, .	141	111	54	306

\* One Scholar holds a Maintenance Scholarship granted by the Waterford County Joint Committee for Technical Instruction.

Scholarships at Residential Schools of Domestic Training, of the value of £15 each, are awarded to a limited number of girls to enable them to attend for one year a regular course of instruction and training in Domestic Economy, such as will cultivate their intelligence and resourcefulness and render them more practical in the performance of home duties. The Scholarship, together with the payment of a fee of £3 on the part of the scholar, entitles the holder to board, residence, and instruction during the term of the Scholarship. (Under the County Cork scheme the value of the Scholarship is only £10, the scholar being required to pay a fee of £8.) Further particulars of the conditions under which the Scholarships are awarded, and the course of instruction which the scholars undergo, are set forth in the County Scholarship Scheme printed in the Appendices, page 282.

The number of Scholarships awarded in 1910 by each Committee adopting the scheme was as follows:—

County Carlow, 10; County Cork, 4; County Dublin, 7; Queen's County, 9; Tipperary Urban and Rural Districts, 2; County Tipperary (North Riding), 4; County Tipperary (South Riding), 6; County Waterford, 3; County Westmeath, 11; County Wexford, 7.

The scholars are distributed between the various approved Residential Schools of Domestic Training as follows:—

Carriek-on-Suir: Convent of Mercy, . . . . .	9
Dublin: Domestic Training Institute, . . . . .	1
Dundrum: Presentation Convent, . . . . .	5
Dunmanway: Convent of the Sisters of Charity, . . . . .	4
Killmore: Convent of St. John of God, . . . . .	14
Moate: Convent of Mercy, . . . . .	14
Stradbally: Presentation Convent, . . . . .	16

Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art School, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these Exhibitions must be eighteen years of age; they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their studies.

Six such Exhibitions were granted on the results of the examinations held in 1910, one Art, one Engineering, and one Building Trades Exhibition being granted to students of the Municipal Technical Institute, Belfast; two Art Exhibitions to students of the Crawford Municipal School of Art, Cork, and one Exhibition in Pure and Applied Science to a student of the Municipal Technical, Science and Art School, Limerick. The Exhibition in Pure and Applied Science awarded to a Student of the last-named institution in 1909 was renewed for a second session.

At the examination for Science and Technological Scholarships and Teacherships-in-Training, held in 1910, fifty-five candidates competed for the five Scholarships and five Teacherships-in-Training offered for competition by the Department, and tenable at the Royal College of Science. The conditions attached to these Scholarships and Teacherships-in-Training are given in Form S. 89, which is printed in Appendices, page 316.

The Teacherships-in-Training at the Metropolitan School of Art awarded in 1909 were renewed for a second year, and, consequently, as there were no vacancies to fill up, a competition was not held in 1910.

SENIOR ART  
SCHOLARSHIPS.

The conditions under which the Teacherships-in-Training are to be offered for competition in 1911 are given in Form S. 2, which is printed in the Appendices, page 314.

Industrial Scholarships are of the value of £80 each, and are renewable for a second and third year at the discretion of the Department. The object of these Scholarships is to enable selected persons (who must already have been engaged in one of the branches of an industry) to take such a course of instruction in that industry, in an institution providing special advanced courses, as will enable them to undertake the management of an industry in Ireland at the termination of their instruction.

Two Industrial Scholarships, one in Linen Manufacture and one in Woollen Manufacture, were awarded in 1910. One Scholarship in Woollen Manufacture, first awarded in 1908, was renewed for a third year, and two Scholarships in Woollen Manufacture, awarded in 1909, were renewed for a second year.

The Scholarship in Linen Manufacture is being held at the Municipal School of Technology, Manchester. Of the four Scholarships in Woollen Manufacture, one is being held at the Technical College, Galashiels, and three at the University of Leeds.

The conditions under which these Scholarships are awarded are given in Form S. 190, which is printed in the Appendices, page 318.

Commercial Scholarships are of the value of £100 each per annum, and are tenable for two years. The object of the Scholarships is to enable selected persons to obtain such a training as will enable them to undertake the teaching of higher commercial subjects in Ireland.

Eight Scholarships were awarded in 1910, the holders attending the London School of Economics and Political Science (University of London).

The conditions under which the Scholarships are awarded are given in Form S. 194, which is printed in the Appendices, page 318.

The Department offered for competition in 1910 three Scholarships tenable at the Training School for Lace and Sprigging Teachers, Enniskillen. The object of the Scholarships is to enable selected applicants, who must have had a satisfactory general education, to secure training as teachers of the subjects mentioned.

Two Scholarships in Crochet Work and one in Sprigging were awarded on the results of the examination held under the conditions of award. Further particulars respecting these Scholarships are given in the Appendices, page 319.

The list of candidates awarded Science and Technological Scholarships and Teacherships-in-Training, Industrial, Commercial, and Crochet Work and Sprigging Scholarships, in 1910, will be found in the Appendices, page 320.

### 3.—FISHERIES.

The report of the the Fisheries Branch for the year 1909 was issued since the date of the Department's last General Report.

The Sea Fisheries were more productive than during the previous year. Excluding salmon their value at place of landing is estimated at about £364,000.

The herring fisheries of the East Coast showed expansion. A substantial increase of curing took place.

There was a decline in the spring mackerel fishery, but an improvement in the autumn season.

The number of vessels actually engaged in fishing (some wholly and some partially), irrespective of those following salmon fishing, was 5,976—104 less than in the previous year; 21,787 men and 445 boys were employed—being 625 men and 53 boys less than in 1908.

Seventeen fishermen lost their lives during the year ended 30th September, 1909, while nine first-class, eight second, and one small, boats were lost.

Loans amounting to over £9,500 were made during the period of 15 months ended 31st March, 1910. The Department continued their policy of developing fishing from motor boats driven by paraffin engines. The work of these vessels has been successful, and substantial benefits arising from the action taken in this matter are looked forward to. Instruction in the working and upkeep of the engines, which was necessary as a result of the introduction of these craft, has been afforded by the Department.

The Department continued to defray the cost of running the net mending class at Kinsale. The average attendance was twenty. About two dozen persons obtained employment in consequence of the instruction given.

One hundred whales were landed during the season between May and September, 1909, at the Whaling Station at South Iniskea Island. From these were prepared 3,900 barrels of oil, 53 tons of guano, 120 tons of bone meal, 124 tons of cattle food, and 14½ tons of whalebone.

Since the passing of the Fisheries (Ireland) Act, 1909, a large number of By-Laws changing close seasons for salmon and trout have been prepared. Some of them are in operation, having received the approval of the Lord Lieutenant in Council. Others have been submitted for such approval.

The Scientific Staff continues to carry out the Irish International investigations for the exploration of the sea in addition to making research on questions more particularly affecting the fisheries of Ireland.

The Department carried out marine works at Hoobawns, county Clare, and began the construction of a pier at Ballaghahine in the same county. The work of widening and extending the pier at Buncrana, county Donegal, was initiated.

The Department continued to enforce the regulations against illegal trawling, and five cases were reported under the Trawling in Prohibited Areas Prevention Act, which came into operation during the year. This Act authorises the Department to report to the Customs Authorities cases in which the Department are satisfied that steam trawling had taken place in any prohibited area to which the Act applies. The effect of the report is that the vessel's fish, if landed in the United Kingdom, becomes forfeited, and any fish so landed by the vessel within two months of the fishing is dealt with as though it had been caught on the occasion of the fishing.

It is estimated that the yield of the salmon fisheries during the year 1909 was 33 per cent. over the average of the past seven years. The Drift Netting operations on the north and north-west coasts, which are mostly carried on by the poorer class of fishermen, showed a very great increase in the number of fish landed. No sign of salmon disease was observed in any part of Ireland.

The Department made the following grants during the year, on certain conditions, to the Board of Conservators of the Districts named:—

	£	s.	d.
Dublin, ... ..	8	15	0
Waterford, ... ..	350	0	0
Lismore, ... ..	150	0	0
Skibbereen, ... ..	25	0	0
Kennmare, ... ..	60	0	0
Killarney, ... ..	100	0	0
Waterville, ... ..	25	8	0
Limerick, ... ..	150	0	0
Sligo, ... ..	20	0	0
Ballyshannon, ... ..	33	0	0

The following Associations also received financial assistance to the extent indicated:—

	£	s.	d.
Lough Derg Fishery Society, ...	50	0	0
Westmeath Lakes Association, ...	13	2	6
Lough Corrib Fishery Association, ...	25	0	0
Lough Mask & Carrig Fishery Association, ...	15	0	0
Lough Arrow Fish Preservation Society, ...	10	0	0

#### 4.—STATISTICS AND INTELLIGENCE.

The work of this Branch, which has greatly developed in recent years, falls under four main heads:—

- (1.) The collection and publication of agricultural, trade, and other economic statistics relating to Ireland;
- (2.) The collection of information both at home and abroad on questions submitted to the Department and affecting its work;
- (3.) The editing of the *Quarterly Journal* of the Department and press-editing of other publications issued by the Department;
- (4.) The distribution and despatch of reports, leaflets, and other publications.

##### STATISTICAL SECTION.

This section has three main divisions—the Agricultural Statistics of Ireland, the Statistics of Irish Imports and Exports, and the Statistics of Prices of Irish Agricultural Products.

The Agricultural Statistics of Ireland include the statistics of the division of land, of the number and size of agricultural holdings and of their distribution, of the area and produce of crops and the numbers and classes of live stock, of the extent and kinds of woods and plantations and of planting and felling operations, and also of the supply and migration of agricultural labour and the wages of the same. Special statistics are also collected as to the area under the different classes of fruit; the extent of the several varieties of potatoes; the different breeds of live stock; the mortality of live stock; bee-keeping; the number and production of creameries, butter factories, corn mills, scotch mills, malt houses; and the numbers and use of the chief classes of farm machinery.

The statistics of the division of land and the number and classes of live stock, together with many of the special statistics, are collected annually in June. The preliminary results of the enumeration showing the changes in the area of crops and the numbers of live stock are published in August or September.

The next work is the collection of information as to the yield of the several crops. Returns of the yield of hay are collected at the end of August, those of grain crops and potatoes at the end of October or early in November, and those of the root crops and flax at the beginning of December. As soon as the information thus collected has been examined and compiled it is issued in a series of bulletins—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Roots, and (5) Flax. This method of division, enables information as to the several crops to be made known at as early a date as possible. Care has, however, to be taken not to collect this final statistical information regarding each crop until almost the whole has been saved, as otherwise an erroneous estimate might be formed. The crop reports on the other hand, which are

published at intervals during the Summer and Autumn, provide preliminary information as to the state and prospects of the several crops.

Finally, in the volume of Detailed Agricultural Statistics which is issued later, full and revised tables are furnished showing, as compared with previous years, the area and produce of crops and the numbers of live stock. In this volume are also contained particulars as to the acreage of agricultural holdings, statistics of forestry, and various other statistics relating to varieties of fruit, live stock, scutch mills, etc.

A separate report is issued annually on the subject of Irish Agricultural Labour. This report in recent years has been considerably extended, and deals not only with the annual migration of agricultural labourers to England and Scotland, but also with the supply of agricultural labour in Ireland, and with the wages earned by Irish agricultural labourers respectively in Great Britain and Ireland.

The first report published by the Department on Irish Import and Export Statistics was for the year 1904, and reports have been published for each year since, that for 1909 being issued in September, 1910. The returns are gradually being brought nearer to date, and it is hoped that the report for 1910 will be issued much earlier than that for 1909. The returns have also been made considerably more complete and accurate as a statement of the external trade of Ireland, but in many respects the information still available is very unsatisfactory. As has been pointed out in the Reports the returns relating to manufactured imports and exports are at present open to serious error, which, under existing conditions, cannot be safeguarded against, and, until adequate statutory powers are provided, it will be impossible to secure returns which are fully complete, reliable, and up-to-date.

Annual reports are issued dealing with the movements of prices of Irish live stock and agricultural produce. PRICE STATISTICS. Arrangements have been made during the last year for a considerable extension of the number of reports received of prices of live stock at markets and fairs, and the development of the system of reporting prices of agricultural produce sold in the principal market towns is at present receiving attention.

Two half-yearly reports are also issued by the Department on the Banking, Railway, and Shipping Statistics of Ireland.

Statistical leaflets are issued to the "Press," public and private companies and private individuals, showing:—

- (1.) Exports of animals. These are issued weekly, monthly and yearly.
- (2.) Prices of live stock at the principal Irish markets and fairs. These are issued daily.
- (3.) The number of pigs killed or bought dead by Irish bacon curers. These are issued weekly.



Enquiries are constantly being received for statistical information from Government departments, public institutions, and private individuals in these and foreign countries and in the Colonies. This involves the compilation of a large number of special statistical tables each year.

The following statistical reports have been issued since the last Annual Report:—

- (1.) Detailed Agricultural Statistics of Ireland for the year 1909. Cd. 5382-1910.
- (2.) General Abstracts of the Acreage under Crops and Numbers and Descriptions of Live Stock in 1910. Cd. 5378-1910.
- (3.) Abstracts of the Average Yield and Total Produce of the following Crops in 1910:—(1) Hay, (2) Grain Crops, (3) Potatoes, (4) Root Crops, (5) Flax.
- (4.) Report and Tables Relating to Irish Agricultural Labourers in 1909-10. Cd. 5063-1910.
- (5.) Report on Imports and Exports at Irish Ports in 1909. Cd. 5354-1910.
- (6.) Return of Prices of Crops, Live Stock, and other Irish Agricultural Produce, 1908-9. Cd. 5281-1910.
- (7.) Two half-yearly Reports on Banking, Railway, and Shipping Statistics in Ireland. Cd. 5148-1910; and Cd. 5462-1910.

#### INTELLIGENCE SECTION.

During the year systematic information as to the condition and progress of the crops was obtained from time to time from correspondents in the several counties, and four crop reports and two fruit crop reports, based on the information obtained, were issued during the course of the Summer and Autumn. During July and August special weekly reports also were received from each Constabulary district as to the nature and progress of the potato blight, and as to the extent of spraying operations.

The systematic collection of information by means of egg records has been continued during the past year, and regular monthly returns have been received from about 180 correspondents. These records have proved of great interest and importance as showing in a concrete way the use of statistical method in farm work. A further development of the work has taken place in the Autumn of this year. Hitherto the records have been of flocks or pens, but a series of records dealing with individual hens by means of the trap-nesting system has been established at 25 centres. The question of the keeping of records, whether in milk or egg production, is a matter of the greatest importance, as it is only by means of the record that reliable comparisons can be made, and

that flocks and herds can be properly weeded of the least profitable stock. At the same time only by such continuous records and observation can the transmission of producing power be ascertained in a reliable manner. It is important, therefore, that this part of the work should be further developed, and that also in other branches of farm management more systematic information should be obtained as to actual costs of production on typical farms in Ireland. There is a great field for the useful development of statistical records and exact method of accounts as applied to farm work.

Among other inquiries special reference may be made to that on the organisation of the dead meat trade. Several reports on this subject were published in the Department's JOURNAL, and further inquiries have been carried on in this matter, which is one of great importance.

In connection with the development of special inquiries the work of compiling a list of the principal Irish exporters for circulation in the Colonies and in foreign countries has been undertaken. The list is at present being printed, and when published will be sent to the Offices of British Consuls in foreign countries and also to foreign Chambers of Commerce and other commercial agencies in countries where there is likely to be a market for Irish produce. At present inquiries are frequently received from foreign countries for the names of firms of Irish producers, and it is hoped that this publication will greatly assist in making known the names of Irish firms and the merits of Irish goods.

The publication of the Quarterly JOURNAL has been continued as heretofore. Several contributions of special practical importance have been re-issued in the form of leaflets or bulletins, including :—

"JOURNAL,"  
LEAFLETS, ETC.

Packing Eggs for Hatching,  
Winter Milk Production,—Experiments in Co. Down,  
Potato Disease in Ireland,  
The Dead Meat Trade,  
Wintering Young Store Cattle,  
Winter Milk Production,—Experiments, Co. Cork.  
Technical Instruction in Londonderry,  
Bootmaking in Ireland.

Seven leaflets were re-issued in a revised form, viz.:—Results of Field Experiments in Barley, Meadow Hay, Potatoes, Mangolds, Oats, Turnips, Flax and Wheat.

In addition to the above a leaflet, not belonging to the regular series, viz.:—"Potato Blight—Digging the Crop," was issued during the period under review.

The special issue of leaflet No. 14 (Prevention of Potato Blight) to National Schools, etc., in Ireland was repeated.

The total number of separate leaflets issued during the year amounted to, approximately, 850,000.

There has been a steady increase in correspondence with foreign countries and in the information furnished to the Department as regards agricultural development abroad. The great increase in agricultural research work as well as in the methods of organisation for the protection and development of agriculture in the different countries is a matter which requires the closest observation. No country can afford to ignore the steps which other countries are taking, or to neglect to compare results. The Department are now in regular communication with the Agricultural Departments of the Colonies and the chief Foreign Countries, and receive an exchange of publications which may be consulted in the Departmental Library.

In connection with the inquiries, statistical and other, carried on by this Branch, the Department have to acknowledge the great assistance received from the Inspector-General of the Royal Irish Constabulary, the Chief Commissioner of the Dublin Metropolitan Police, the Registrar-General for Ireland, the Managers of the Irish Banks, the Irish Railway Companies, the Irish Port and Harbour Authorities, and also from a large number of correspondents who have furnished information on agricultural and other questions.

## 5.—VETERINARY.

The Veterinary Branch deals with the work connected with the Department's functions as the Central Authority in Ireland under the Diseases of Animals Acts. A separate and detailed report in relation to the proceedings under these Acts is issued for each calendar year. Consequently it is unnecessary to do more in the present report than to touch briefly on some of the points in respect to the business of the Branch during the twelve months ended 30th June, 1910.

A circumstance calling for note in the above period was the issue by the Department of an Order relating to Bovine Tuberculosis, a disease not previously scheduled under the Diseases of Animals Acts in Ireland. This Order is of a preliminary character, requiring merely that cases of tubercular emaciation or of udder disease in cattle shall be notified by owners to the Police. The object of this requirement is explained in the preamble to the Order, which states that it is "expedient that further information respecting the extent to which these forms of the disease occur in Ireland should be obtained before any general Order is issued under the aforesaid Acts providing for the slaughter of cattle so affected, and the payment of compensation in respect thereof."

The Order came into force on 14th February, 1910, and the reports received thereunder up to 30th June following related in all to 253 cattle, of which 226 were stated to be emaciated and 27 suffered from affections of the udder.

Among cattle in Ireland Anthrax is not of frequent occurrence, but a few cases of the disease, generally of an isolated character, come under notice every year. The record in the matter for the twelve months ended 30th June last is 10 outbreaks, distributed over 9 counties and involving the death of 13 animals.

#### ANTHRAX.

In the same period the total number of swine fever outbreaks confirmed in Ireland was 85. This figure is substantially below the normal. During the preceding twelve months 109 outbreaks occurred, and for the four years prior to that period the average number of outbreaks was about 172 annually.

#### SWINE FEVER.

During the twelve months ended 30th June, 1910, 463 outbreaks of Sheep Scab were recorded as compared with 411 in the preceding year. These figures would show that the special efforts made in recent years for dealing with this disease have not yet borne the desired fruit. The increase in 1909-10 can, however, in part be accounted for by the greater attention generally given to the condition of sheep, resulting in the detection of cases of scab which formerly would probably have remained unreported.

#### SHEEP SCAB.

A new Sheep Dipping Order, providing for two dippings annually of all sheep in Ireland, was issued early in 1910. This Order takes the place of (i.) the previous Order of 1907 as regards a Summer Dipping, and (ii.) the temporary Order of 1909 in relation to an Autumn Dipping. Statistics as to the number of sheep dipped under the new Order will be available when the next report is being prepared. At present it is only practicable to give the figures for 1909, when the older Orders were in operation. For that year the returns showed 2,825,464 sheep dipped in the Summer Period and 1,893,534 in the Autumn Period.

The record as regards Parasitic Mange among equine animals in Ireland during the twelve months ended 30th June, 1910, is, on the whole, satisfactory. Sixty-two outbreaks were recorded in this period, a slight reduction on the previous twelve months when 67 outbreaks were reported. These figures are well below the average of earlier years.

#### PARASITIC MANGE.

A single outbreak of Glanders came to notice during the year under review. Two horses were affected. The matter was dealt with in the usual way by destruction of the diseased animals and careful subsequent cleansing and disinfection of the place where they had been stabled.

#### GLANDERS.

An Order of the Department, dated 23rd May, 1910, issued in pursuance of the Diseases of Animals Act, 1910, imposes on Veterinary Surgeons and Veterinary Practitioners in Ireland the obligation of reporting any cases of the following diseases, viz.:—cattle plague, contagious pleuro-pneumonia of cattle, foot and mouth disease, sheep pox, sheep scab, swine fever, anthrax, epizootic lymphangitis, rabies, glanders and farcy and parasitic mange, that may come under their notice in private practice; and provides for the payment by the Local Authority of a fee of two shillings and six pence in respect of each such report.

## 6.—TRANSIT AND MARKETS.

Under this head are grouped matters relating to—

- The transit of animals;
- The transit of produce;
- Railway rates;
- The enforcement of the Sale of Food and Drugs Acts as regards butter, margarine, cheese, margarine-cheese and milk;
- The Merchandise Marks Acts;
- The work of the Department's Inspector for Irish Agricultural Interests in Great Britain; and
- The Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.

### TRANSIT OF ANIMALS.

The carriage of live stock by railway in Ireland and their shipment to Great Britain continued to receive the close supervision of the Department's Inspection Staff. Detailed information as to this work is published separately in the Annual Reports of the Department under the Diseases of Animals Acts.

### TRANSIT OF PRODUCE.

The Transit Inspection Staff consists of a Superintending Transit Inspector and four Inspectors. These officers continued to visit railway stations and ports and to report on such matters as the arrangements made by the carrying companies for the conveyance of produce, the condition of the consignments in transit, and the manner of handling the consignments. The Inspectors interviewed a large number of merchants dealing in Irish produce in the principal centres of Great Britain with regard to the condition in which consignments were delivered and made inquiries in cases of delay or damage in the conveyance of consignments.

Cases in which the reports showed that the produce had been carelessly handled or loaded by the servants of carrying companies were brought under the notice of the companies concerned, and in this way an opportunity was afforded to the companies of taking any action which might appear desirable with a view to prevent recurrences. In cases of carelessness in preparing packages of produce for the market or of the use of unsuitable receptacles for the conveyance of the packages, communications pointing out the defects and giving advice as to improvements were sent to the consignors.

The following figures will give some indication of the extent of inspections, the work performed under this section :—

No. of Inspections made at Railway Stations in Ireland, ...	977
" " Railway Stations in Great Britain, ...	84
" " Ports in Ireland, ...	188
" " Ports in Great Britain, ...	20
Number of Merchants interviewed in Great Britain, ...	275

A large number of inquiries were made as to the transit of various articles of produce.

#### *Butter.*

The Inspectors report that more attention is given to the preparation of packages of butter for the markets. The boxes and the casks were, on the whole, more firmly constructed and more neatly finished. Comparatively few flimsily constructed boxes or casks came under notice. There was a marked increase in the use of square or oblong boxes for the conveyance of butter from places in Ireland to Great Britain—doubtless due to the increased demand for butter in rolls.

Consignors are sometimes not careful in securing that the carts in which packages of butter are conveyed to the railway stations are in a cleanly condition, and that the packages are protected from adverse conditions of weather during conveyance. The number of cases of carelessness in these respects coming under notice was, however, less than formerly.

Increased care was exercised in the handling of consignments of butter by the servants of carrying companies. The improvement was particularly noticeable at the larger stations and ports. Occasionally, however, it was noticed that boxes of butter had not been carefully placed in the waggons; or had been loaded into waggons which were not in a sufficiently clean condition, or which contained articles likely to taint the butter.

During the season there did not appear to be any increase in the demand for refrigerator vans for the carriage of butter. The season was, however, on the whole, cool.

**SPECIAL VANS.** There are 30 refrigerator vans and 170 other special vans available for the conveyance of butter over Irish lines.

Eleven of the steamers in which agricultural produce is conveyed from Ireland to Great Britain are fitted with refrigerating plant. These vessels trade from the ports of Cork, Rosslare, and Waterford.

Merchants interviewed in Great Britain drew attention to the practice which extensively prevails of consigning butter under mark from Ireland to Great Britain. The absence of the name and address of the consignee from the package is calculated to increase the risk of delay in delivery. There may be reasons for not putting the name and address on the package, but the liability to delay in delivery, with the resulting inconvenience and disappointment to consignees, should far outweigh any advantage which may appear to consignors to result from the adoption of the practice. Any method of consigning which might increase the risk of delay or misdelivery should not be adopted.

### Eggs.

The cases used for the conveyance of eggs are considerably improved as compared with the cases in use some years since. The type of case for holding six hundred eggs is constructed of much stronger and cleaner timber. A defect observed not infrequently was the existence of rather wide spaces between the boards forming the cases. Such spaces admit of eggs being pilfered, and, unless the boards used are extra strong, render the packages more liable to injury in transit. Some few instances of cases not being provided with openings or other means to facilitate lifting came under notice. The providing of suitable means by which the cases could be lifted should conduce much to safety in conveyance. A few instances of the use of flimsily constructed cases or of cases being made from unsuitable timber came under observation. There appeared to be an increase in the number of cases containing three hundred or four hundred eggs.

The use of unsuitable material for packing has formed the subject of much unfavourable comment by egg merchants in Great Britain, and must have operated to the detriment of the Irish egg trade. More care was undoubtedly being exercised in the use of dry straw for packing, yet complaint was made that the straw was found damp in cases received at the premises of consignees. In many instances the packing material must have been damp at the time of use or the packing must have been carried out in the open under rain. Sometimes, however, the dampness was, no doubt, due to exposure to rain

**PACKING  
MATERIAL.**

**CASES.**

during conveyance to the railway stations or while the cases were in charge of the carrying companies.

The absence at many of the egg markets in Ireland of suitable covered places for the protection of the eggs from rain, when being exposed for sale or being packed for transit, is of no small disadvantage to the Irish egg industry. In certain cases the Department urged on local bodies the desirableness of providing, at markets, such suitably covered places. At one important market the local authority, as a result of representations from the Department, arranged for the erection of a shed in which eggs could be packed. At another market a shed was provided, but some difficulty arose as to the conditions on which it would be used by egg merchants. An Inspector was deputed to inquire into the matters of difference, and, as a consequence, proposals were made which, it is hoped, will result in the shed in question being utilised, and also in the erection by the local authority of a second shed for the purposes of the egg trade.

The practice of purchasing eggs by weight is extending through parts of the North and West of Ireland.

It was noticed that generally eggs were marketed in a more cleanly condition than formerly. Many of the leading buyers now refuse to purchase soiled eggs.

There is an undoubted improvement in the handling of consignments of eggs by the servants of the carrying companies. If breakages are to be avoided, the greatest care is required on the part of consignors and of the carrying companies in dealing with the consignments. Suitable cases, proper methods of packing, and due care in handling and conveyance are necessary if the consignments are to reach the markets in good condition. Not many instances of carelessness in the handling of the traffic came under notice, still strict supervision over the handling of such traffic is necessary, there being a likelihood that the persons engaged in moving the cases will sometimes adopt the method which appears easier for them rather than that which is suitable for the traffic.

At certain stations special hand-barrows were provided for moving cases of eggs. One shipping company laid down dunnage to protect cases from getting soiled while awaiting shipment, and another shipping company increased the number of battens used by them for the purpose.

#### *Live Fowl.*

The Inspectors noticed that unsuitable crates were often used for the conveyance of live fowl. The space for the number of birds was insufficient, the ventilation was inadequate, and there was much room for improvement as regards cleanliness. One case came



under notice in which birds had been suffocated. Sufficient head space was not left for the birds and the crates were not divided into compartments. The absence of compartments increases considerably the risk of injury to birds during conveyance, as, in the event of the crates being tilted, the birds get thrown to the lower end.

Inquiries have been made by the Department's officers as to the dimensions of crates which have been proved by experience to be most suitable for the conveyance of live poultry.

The question of obtaining power to make regulations for the traffic in live poultry is under consideration.

### *Fruit.*

During the season, special visits were made by the Department's Inspectors to stations in the fruit-growing districts. At the principal stations from which fruit is despatched, special arrangements had been made to meet the needs of the traffic. From certain stations the fruit is forwarded in special vans attached to passenger trains. From one of the stations a special fruit train is forwarded each night during the season to connect with mail trains. The siding accommodation at one station was extended for the purpose of the fruit traffic.

### *Fish.*

The Inspectors visited railway stations from which fish is despatched and looked into the arrangements made for conveyance. Inquiries were also made into complaints received as to the transit of fish. One railway company in the north of Ireland provided special waggons so that the icing of consignments could be carried out during conveyance over the line. This arrangement enables the work of icing to be carried out more satisfactorily than formerly when it had to be done hurriedly at a station.

In one case complaint was made that suitable waggons had not been provided for the conveyance of fish from a southern fishing station—the absence of such waggons necessitating a transhipment of the consignments. The Department made representations to the railway company, and on subsequent inquiry the Department were informed that an ample supply of passenger train vehicles for the conveyance of the traffic had been provided.

### *Transit in Great Britain.*

During the twelve months ended the 30th June last, the Transit Inspectors made 20 visits to the principal ports in Great Britain at which Irish produce is landed, and on 34 occasions visited the principal stations to which Irish produce is conveyed. There was evidence that stringent instructions had

HANDLING OF  
PRODUCE.

been issued by the Companies to their servants as to the manner in which agricultural produce should be dealt with. At several stations where formerly one man only handled cases of eggs, the work of moving each case of eggs was carried out by two men.

The produce was, on the whole, carefully dealt with, but in some isolated instances the consignments were not handled with due care. In those cases attention was drawn to the occurrences.

Satisfaction was expressed by merchants interviewed in Great Britain as to the use of screw-coupled waggon for the conveyance of agricultural produce over certain railways in Great Britain. This method of coupling reduces the jolting in transit and must consequently minimise the risk of breakage specially in consignments of eggs.

The opinion was generally expressed by the merchants that Irish produce reached the markets in a much improved condition. The packages were more carefully prepared and there was a less number of breakages and of delays in transit.

#### *Delays and Damage in Transit.*

During the period 1st July, 1909, to 30th June, 1910, 69 complaints were received as to delays or damage to consignments in transit. A summary of the complaints and of the results of the inquiries will be found in the Appendices, page 417.

#### *Railway Rates.*

The Department were asked to appear before the Railway and Canal Commissioners in support of an application made to the Commissioners on behalf of a firm of agricultural machinery makers for a certain through rate between a town in the east of England and Dublin for heavy agricultural machinery. The Department did not see their way to intervene in the case. The application was, it appeared, subsequently withdrawn.

From the 1st July, 1909, to the 30th June, 1910, 62 complaints were received as to charges by carrying companies for the conveyance of merchandise. The complaints related to butter, cattle, coal, eggs, fish, fruit, margarine, milk, potatoes, poultry, shellfish, etc. A summary of the Department's action with regard to the complaints will be found in the Appendices, page 408.

Six of the complaints had reference to the non-existence of through rates. In three of these cases through rates were fixed. Two cases are pending.

Thirty-three of the complaints were that through rates already in operation were excessive. Reduced rates were fixed in fourteen cases and in two of these cases refunds were made. In three other cases refunds were also made. Four cases are pending.

Twenty of the complaints had reference to local rates. Reductions were made in two cases, and refunds in seven cases. In one case it was stated that a refund would be made. One case is pending.

One complaint was in respect of a charge for demurrage, and two in respect of charges for cartage.

The Department were asked to take action with a view to have the owner's risk conditions for the conveyance of traffic over Irish lines amended in accordance with certain modifications which were adopted by the English and Scottish Companies. The agreements which had been generally in force between Railway Companies and consignors for the conveyance of goods at owner's risk rates relieved the Companies from all liability for loss, damage, misdelivery, delay or detention, except upon proof that the loss, damage, misdelivery, delay or detention arose from wilful misconduct on the part of their servants. The English and Scottish Railway Companies have, it appears, agreed, in the case of goods conveyed at owner's risk, to accept liability in certain cases of non-delivery, pilferage, misdelivery, loss or delay, except on proof that the non-delivery, etc., had not been caused by negligence or misconduct on the part of the Company or their servants. So far a corresponding modification has not been adopted by the Irish Railway Companies. The question is receiving attention.

*The Enforcement of the Sale of Food and Drugs Acts, as regards Butter, Margarine, Cheese, Margarine-Cheese and Milk.*

The Councils of the thirty-three administrative counties and of the boroughs of Dublin, Belfast, Clonmel, Cork, Drogheda, Kilkenny, Limerick, Londonderry, Sligo, Waterford and Wexford, are the Local Authorities for the purpose of the administration of the Sale of Foods and Drugs Acts in Ireland.

In thirty-one administrative counties the duties of Inspectors under the Acts are performed by members of the Royal Irish Constabulary and in the two remaining counties by members of the Royal Irish Constabulary and by local officers.

In five Boroughs—Dublin, Belfast, Clonmel, Drogheda and Kilkenny—the Inspectors are not members of the police forces, in three Boroughs—Cork, Sligo and Wexford—the duties are discharged by members of the Royal Irish Constabulary, and in the remaining three Boroughs—Limerick, Londonderry and Waterford—members of the Royal Irish Constabulary, together with local officers, act as Inspectors.

The following table shows the numbers of samples of butter, margarine, cheese and milk taken by Inspectors in the Counties and in the Boroughs, for analysis, during the year 1909 and the half-year ended the 30th June, 1910, together with the numbers of prosecutions instituted in respect of the samples.

COUNTIES.	Butter.	Margarine.	Cheese.	Milk.	Total number of Prosecutions.
Year 1909 . . . . .	4,362	68	583	5,232	354
Half year ended 30th June, 1910.	1,950	32	289	2,673	172
BOROUGH.					
Year 1909 . . . . .	832	88	30	3,170	176
Half year ended 30th June, 1910.	486	59	17	1,649	121

Tables giving detailed particulars as to the samples will be found in the Appendices, page 430.

Under sections 2 and 24 of the Sale of Food and Drugs Act, 1899, the Department are empowered, in relation to any matter appearing to them to affect the general interests of agriculture, to direct their officers to procure for analysis samples of any article of food. Acting under instructions given in the exercise of this power three officers of the Department obtained during the year ended 31st December, 1909, for analysis, 865 samples sold as butter. Of these samples (43 of which were sold as salt firkin butter), 29—5 being salt firkin butter—were found on analysis to contain over 16 per cent. of water, 7 were certified as 'consisting nearly altogether of fats foreign to butter, and 1 was stated to contain 60 per cent. of fats foreign to butter.

Prosecutions were instituted by the Local Authorities in respect of 20 of the samples found to contain an excessive proportion of water. Seventeen convictions were obtained and penalties to the amount of £12 15s. 9d. were imposed. One case was dismissed, and two were withdrawn—one on account of an irregularity in the form of the summons, and one on payment of costs by the defendant. In one case it became necessary for the Department to empower their officer to institute proceedings. A fine was imposed and the defendant was directed to pay costs. In the remaining 8 cases no proceedings were instituted. In 3 cases the excess of water was very slight, in 2 cases the statutory time

limit had expired, and in the remaining 3 cases (salt firkin butter) notices as to the percentage of water in the butter were displayed at the time of purchase.

As regards the seven samples which were found to consist almost entirely of fats foreign to butter and the sample which contained 60 per cent. of foreign fats prosecutions were instituted by the local authorities in these cases. Seven convictions were obtained and penalties amounting to £37 were imposed. The remaining case was dismissed with a caution.

During the half-year ended the 30th June, 1910, 493 samples sold as butter (including 14 sold as salt firkin butter) and 5 samples sold as margarine were obtained by the Department's officers.

Of the samples sold as butter, 16 were found to contain water in excess of 16 per cent.—the excess in 8 cases being, however, very slight—one was certified as containing 26.12 per cent. of fats foreign to butter, and one as consisting almost entirely of fats foreign to butter. Prosecutions were instituted in respect of 6 of the samples found to contain excessive moisture; convictions were obtained and penalties amounting to £3 18s. 11d. were imposed.

In the case of the sample which was found to contain 26.12 per cent. of fats foreign to butter, the result of the analysis was communicated to the local authority concerned, but action for the institution of proceedings was not taken before the expiration of the statutory time limit.

In regard to the sample which was found to consist almost entirely of fats foreign to butter, it was represented to the Department that a Dublin trader was suspected of supplying margarine instead of butter in a district in the Co. Dublin. Arrangements were made to obtain a sample in course of delivery. The sample was obtained, but attempts were made by the vanman to recover possession of the sample from the Inspector. Proceedings were instituted against the trader for selling margarine as butter, and for the delivery of margarine in a wrapper not marked in the prescribed manner. The vanman was prosecuted for obstructing the officer. The trader was convicted on both charges and fined £5. The magistrates made no rule in the case against the vanman.

Offences under the labelling clauses of the Acts appeared to have been committed in the case of four of the five samples of margarine obtained. Proceedings were instituted in respect of three samples; convictions were obtained and penalties amounting to £3 14s. were imposed. In the case of the remaining sample, it was not found practicable to have proceedings instituted within the statutory time limit.

Tables giving particulars as to the samples taken during the year 1909, and during the half-year ended the 30th June, 1910, will be found in the Appendices, page 436.

At the close of the year ended 30th June, 1910, five manufactories of margarine and one manufactory of margarine-cheese were registered with Local Authorities. The number of premises registered for wholesale dealings in margarine or margarine-cheese was 129. These figures, when compared with the figures on the 30th June, 1909, show a decrease of one in the number of manufactories of margarine and of two in the number of premises registered for wholesale dealings. Notifications were received that during the year ended 30th June, 1910, seven registrations for wholesale dealing in margarine or margarine-cheese (five in Belfast, one in Cork and one in King's County), and one registration as a manufactory of margarine (in Cork) were effected, and that nine registrations for wholesale dealings (eight in Belfast and one in Cork), and two registrations for the manufacture of margarine (one in Cork and one in County Dublin) were cancelled. A statement showing, as on the 30th June, 1910, the distribution of the registered premises will be found in the Appendices, page 438.

Officers of the Department inspected periodically the registers which manufacturers of, and wholesale dealers in, margarine or margarine-cheese are obliged to keep, showing the quantity and destination of each consignment sent out from their manufactories or places of business. Some cases of failure to keep a register, or of not keeping the register properly posted up-to-date, came under notice. In a few cases the registered premises were not open at the time of the officers' visits. Suitable action was taken in each case.

Butter factories, that is to say, premises on which by way of trade butter is blended, re-worked, or subjected to any other treatment, but not so as to cease to be butter, must in each case be registered with the Local Authority of the administrative county or borough in which the factory is situated. On the 30th June, 1910, the number of registered butter factories in Ireland stood at 145. The factories were situated in seventeen counties and seven boroughs. The number as registered on the 30th June, 1909, was 87. As regards two butter factories, which were temporarily registered, registration has been renewed in one case for a further period of twelve months. Further registration in the other case is pending. Notification of upwards of 50 additional registrations, since the 30th June, 1910, has been received. A statement showing, as on the 30th June, 1910, the number and distribution of the registered butter factories will be found at page 439 of the Appendices.

Visits were made by officers of the Department to a number of unregistered premises which were reported to be used as butter factories, and, where necessary, action was taken with a view to registration.

During the period under review, officers of the Department made a large number of visits to butter factories

**INSPECTION OF BUTTER FACTORIES.** for purposes of inspection. In no case was any substance likely to be used in the adulteration of butter found in a butter factory. In one instance, small openings were found to exist in a wall dividing a butter factory from a margarine factory. On the representation of the Department the openings were built up with brickwork. In the course of the inspections at butter factories inquiry was made as to the descriptions on boxes and wrappers in which butter treated at the factories was despatched. Representations were made to the persons concerned with a view to the discontinuance of descriptions which were regarded as misleading.

During the twelve months ended the 30th June, 1910, officers of the Department took a large number of **SAMPLES TAKEN AT BUTTER FACTORIES.** samples at butter factories. Some of the samples were taken from butter which had not been blended or re-worked in the factories.

In a comparatively small number of cases in which the butter had been treated in the factories, the proportion of water was found on analysis to exceed 16 per cent., and the attention of the proprietors was drawn to the provision of the Butter and Margarine Act, 1907, in regard to the maximum proportion of water—16 per cent.—allowable in butter which had been subjected to treatment in a butter factory.

Under Sections 2 (3) (b) and 14 (1) of the Butter and Margarine Act, 1907, the Department may, if they have reason to believe that on any premises butter

**SPECIAL INSPECTIONS UNDER SECTION 2 (3) (b) BUTTER AND MARGARINE ACT.** is by way of trade either made or stored, and that for the purposes of the Sale of Food and Drugs Acts or the Butter and Margarine Act inspection is desirable, specially authorise any of their officers to enter the premises, and in such case the officer shall have the like powers of entry, inspection, and sampling as if the premises were registered under the Sale of Food and Drugs Acts or the Butter and Margarine Act.

In seven cases it was deemed desirable by the Department to exercise this power. Reports having been received that margarine was supplied as butter by traders in Dublin to persons and institutions in Great Britain, special authority to enter certain premises for the purposes of inspection and sampling was issued to officers of the Department. Samples were accordingly obtained and submitted for analysis. In one case, in which six samples were taken, five of the samples were found to be composed almost entirely of fats foreign to butter. Two of these samples were taken from packages addressed to customers, one from a package which had apparently been returned from a customer, and the remaining two samples from boxes on the premises. In no case was there any mark or indication that the substance was not butter. Proceedings for not marking the

packages as required by Section 6 of the Margarine Act were instituted. A plea of guilty was entered, and a fine of £10, with £20 costs, was imposed.

In another case, in which three samples had been taken, one of the samples was found to be composed almost entirely of fats foreign to butter. The box from which the sample was taken not being marked "Margarine," proceedings were instituted against the trader. A plea of guilty was also entered in this case, and a fine of £5 was imposed.

In a third case, a sample taken from a box which was not marked to indicate that it contained margarine was found on analysis to consist almost entirely of fats foreign to butter. Proceedings instituted in respect of the sample were, however, withdrawn owing to the absence of a necessary witness. Four samples were taken at the premises.

In a fourth case six samples were taken—all from packages which had been addressed to customers. Five of the samples were found to consist almost entirely of fats foreign to butter, but there were no marks on the parcels to indicate that they contained margarine. Proceedings were instituted for failing to have the parcels marked "Margarine." The case was, however, dismissed as evidence was given that the person summoned was not the owner of the premises.

In a fifth case three samples were taken. No irregularity, however, to warrant the institution of proceedings came under observation.

In a sixth case, two samples were taken. There was no irregularity as to labelling.

In the remaining case, no butter or margarine was found on the premises.

Applications for the approval of 21 names for use in connection with margarine were received by the Department during the year ended the 30th June, 1910. Eighteen of the names were approved.

A list of the approved names is printed at page 439 of the Appendices. For the information of the officers engaged in the administration of the Sale of Food and Drugs Acts, the Local Authorities of the several administrative areas are supplied with lists of the names approved by the Department for use in connection with margarine.

No application for the approval of a name for milk-blended butter was made to the Department during the period.

No notification of the registration of any premises, in this country, for the manufacture of milk-blended butter has been received by the Department.

The Commissioners of Customs and Excise inform the Department that, during the twelve months ended the 30th June, 1910, their officers took at Irish ports, under Section 1 of the Sale of Food and Drugs Act, 1899, and Section 5 of the Butter and Margarine Act, 1907, twenty-four samples, viz.: six samples

NAMES FOR  
MARGARINE.

MILK-BLENDED  
BUTTER.

SAMPLES TAKEN  
AT IRISH PORTS.



of margarine at Dublin, ten samples of margarine and four of condensed milk at Belfast, and four samples of margarine at Cork.

A list of the Analysts acting under the Sale of Food and Drugs Acts for the Boroughs and Counties in Ireland will be found in the Appendices, page 440.

#### ANALYSTS.

#### *Merchandise Marks Acts.*

The Merchandise Marks (Ireland) Act, 1909, gave power to the Department to make, with the concurrence of the Lord Chancellor of Ireland and of the Board of Trade, regulations providing that, in cases which appeared to the Department to relate to Irish agricultural produce, or to the produce of any other Irish rural industry, and to affect the general interests of the country, or of a section of the community, or of a trade, the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, should be undertaken by the Department. In pursuance of the power so given, Regulations, dated the 14th April, 1910, were made by the Department. A copy of the Regulations will be found in the Appendices, page 441.

Up to the 30th June, 1910, no application was made to the Department to undertake a prosecution under these Regulations.

In connection with the work of preventing sales of margarine as butter, arrangements were made by the Department to have butter ordered by a purchaser residing in the country from a certain firm in Dublin. Samples of four parcels supplied were submitted for analysis, and in three cases the samples were found to be composed almost entirely of fats foreign to butter. The article in the parcel first received was found to be butter. In each case the article was enclosed in a box on which the following markings appeared, "This butter is guaranteed to be absolutely pure," "First Prize Dairy Butter," "Finest Fresh Butter." Proceedings under the Merchandise Marks Act, for the application of a false trade description, were instituted by the Police. There were two defendants. The case was before the Southern Police Court on the 27th May, 1910, when one of the defendants was returned for trial at the City Commission—the case against the other being withdrawn. At the Commission in August the person charged was found guilty, and a fine of £50, with the alternative of four months' imprisonment, if the fine was not paid within 48 hours, was imposed. The fine was paid.

#### SALE OF MARGARINE AS BUTTER.

Much attention was given to the question of misleading descriptions applied to butter. Several cases were looked into, and it appeared that descriptions, blended or re-worked butter had been described as creamery butter or as dairy butter, and that foreign and colonial butters had been enclosed in wrappers marked in a manner which might lead purchasers to believe that the butter was made in Ireland. Communications were sent to the consignors concerned, and in certain cases the descriptions were altered. The question continues to receive special attention.

Inquiries were made by the Department as to the alleged sale of foreign eggs as Irish and of foreign lace as, INQUIRIES. Irish. Cases as to the descriptions under which serge and boots, stated to be imported, were sold were also investigated. In no instance was evidence to sustain a prosecution obtained.

A complaint was made to the Department as to the sale, as cider, of a beverage which was not believed to be of that description. The Department arranged to obtain samples with a view to proceedings, should it be found that a false trade description was applied to the article.

#### *Inspector for Irish Agricultural Interests in Great Britain.*

The work of the Department's Inspector for Irish Agricultural Interests in Great Britain was continued. The chief aim of the Department in this section of their work is the prevention of frauds affecting Irish produce. Suitable cases are brought into court, watchfulness is exercised over the transactions of suspected parties, and cautions are given in cases in which such a course seems likely to have the desired effect.

Firms were interviewed as to the use, in connection with goods not produced in Ireland, of descriptions which might lead purchasers to believe that the goods were Irish, and, as a result, the descriptions were in most instances withdrawn. In many cases the opening up of a market for genuine Irish produce has also resulted.

Butter is one of the most important products in respect of the sale of which frauds injurious to the Irish industry are possible. Many cases came under notice in which butter, which did not appear to be creamery butter, was verbally described as such, but no case occurred in which sufficient grounds existed for the institution of proceedings under the Merchandise Marks Act. There is no doubt that the public sittings, in Great Britain as well as in Ireland, of the Departmental Committee on the Irish Butter Industry, at which the descriptions proper to the different classes of Irish butter were discussed, had considerable effect in making traders specially careful as to the marking of the butter sold by them.

Several applications were received that proceedings should be undertaken against persons who had obtained Irish produce but had not paid for it. The practice appeared to be rather common, the following method of procedure being generally adopted:—A room is rented in a place having an attractive name, and a few Irish producers are asked to send sample boxes of butter, a cheque in many cases to pay for the first consignment being enclosed. The box of butter having been received, a further consignment is ordered but no payment is made. There were several cases in which goods obtained were not paid for and in which criminal proceedings could not well be instituted, as false pretences in the transactions could not be established.

In one case in which proceedings were instituted for fraud in Great Britain, the person charged had also obtained butter from consignors in Ireland and had not paid for it. The accused was convicted and sentenced to imprisonment for twelve months with hard labour. The accused was also sentenced to twelve months' imprisonment, to run concurrently, in respect of the charges in regard to obtaining Irish butter. A person who had been associated with the accused was also sentenced to twelve months' imprisonment, with hard labour, on a charge of obtaining on credit goods exceeding in value the statutory amount, without disclosing the fact that he was an undischarged bankrupt. At the hearing of the case, evidence was given by the Department's officers that the person charged had obtained butter from persons in Ireland and had not paid for it. The bringing forward of this case was mainly due to the Department's Inspector.

With a view to a test whether sales of margarine as Irish butter were being continued to any considerable extent, a large number of samples were purchased, especially during a period at which Irish butter was dear. The result showed that there was a further decrease in such sales. The favourable result may in no small measure be due to increased activity on the part of Local Authorities in whose areas the fraud was, some time since, found to be prevalent.

Complaints were received that certain establishments in Dublin, which did business with customers in Great Britain, were supplying margarine instead of butter. Samples of the article supplied from these establishments were obtained in different districts, and the result of the examination of the samples showed that in some instances margarine was supplied as creamery butter and in others as best dairy butter. The establishments in question were dealt with locally with satisfactory results (see Sale of Food and Drugs Section). The Board of Agriculture and Fisheries gave valuable assistance in having inquiries made and samples obtained.

Many complaints were received by the Inspector in regard to the quality of butter or the percentage of moisture in butter, or as to short weight in consignments. The questions in dispute were, in the great majority of cases, arranged satisfactorily.

Several instances came under notice of eggs being exposed for sale in boxes of the Irish type, but on which there was no mark to show the country of origin of the eggs. Undoubtedly considerable fraud takes place in the sale, as Irish eggs, of foreign eggs which have been packed into cases which contained Irish eggs or which resemble Irish cases; but the absence of any mark as to the eggs being Irish makes it impossible to deal with the matter under the Merchandise Marks Act.

PROSECUTION AT OXFORD. In one case, however, proceedings were instituted. In February, 1910, a firm in Oxford exposed for sale eggs in boxes labelled "Irish New Laid." Some of the eggs were purchased and were pronounced to be not Irish. The matter was brought by the Inspector under the notice of the Board of Agriculture and Fisheries, who instituted proceedings in respect of the transaction under the Merchandise Marks Act. It was admitted that the eggs were Styrian. Fines amounting to £15 and costs were imposed on the firm, and the firm's manager was fined £5.

Certain Boards of Guardians and others having the placing of contracts for Irish eggs, invited the Inspector to assist them in arranging for the examination of samples of the eggs supplied. Samples of the eggs were taken from time to time and submitted to expert examination.

BACON. Sales of foreign bacon as Irish did not appear to be carried on to the same extent as formerly. Some traders who were selling as Irish, bacon which was pronounced by experts to be of foreign origin, were warned and undertook to discontinue the sales. Their premises were subsequently visited, with the view of ascertaining whether the undertakings were being carried out.

In two cases proceedings were instituted in respect of descriptions applied to bacon. In one of the cases, the Inspector, in June last, noticed that a side of bacon which was exposed for sale at the premises of a firm in Hampshire was described on a ticket attached as "Denny's Best." On close inspection it was found that the bacon bore the Danish Government mark. Proceedings under the Merchandise Marks Act were instituted by the Board of Agriculture and Fisheries. A conviction was obtained, and fines amounting to £4 with costs were imposed.

In the other case one of the Inspector's assistants purchased, in September last, at the premises of a trader at Stockport, bacon to which was attached a label bearing the words "Finest Irish." The bacon was found to bear a brand which appeared to be that of the Netherlands Government. Proceedings under the Merchandise Marks Act were instituted by the Board of Agriculture and Fisheries. A conviction was obtained, and a fine of 10s., with £7 costs, was imposed. The Agricultural Commissioner to the Netherlands Government gave evidence at the hearing of the case.

For some time inquiries were made in regard to the methods of trading adopted by persons representing themselves as "The Irish Linen Company."

LINEN.

It was found that samples of handkerchiefs were hawked from door to door, and that circulars indicating that the goods were made in Belfast, and stating that the Company sold a fine linen handkerchief at the price of a common cotton one accompanied the samples. One of the circulars used asked for encouragement for the Irish linen industry. Samples were submitted to expert examination and were found to be cotton. At the instance of the Inspector proceedings for conspiring to obtain money by false pretences with intent to defraud were instituted by the Director of Public Prosecutions. At the preliminary investigation of the case at the South Western Police Court, London, the three defendants were committed for trial. When the case came for trial at the Central Criminal Court in March, 1910, the defendants pleaded guilty. Two of the defendants were sentenced to imprisonment for terms of one month and three months, respectively, and the remaining defendant was, owing to bad health, bound over to come up for judgment if called upon. These proceedings resulted in the removal of misleading descriptions from the circulars of other persons engaged in the business of hawking handkerchiefs from door to door.

Several advertisements, offering, as Irish linen, articles which did not answer that description, were withdrawn on representations being made to the advertisers by the Inspector.

Cases came under notice in which notepaper not of Irish manufacture was placed on the market under designations which might lead purchasers to believe that the paper was made in Ireland. In several instances the paper was sold as being of Irish manufacture to the Inspector's assistants. The Department communicated with the firms issuing the paper, and in some cases the designations were withdrawn. The other cases are receiving attention.

NOTEPAPER.

Complaints were investigated in regard to damage in transit to consignments of butter and eggs, and in several instances claims made were satisfactorily settled.

DAMAGE IN TRANSIT.

*Markets and Fairs (Weighing of Cattle) Acts, 1887 and 1891.*

Officers of the Department made over 100 inspections and inquiries in connection with the question of the provision of accommodation for weighting cattle at fairs at which tolls are taken and at auction marts. Whenever necessary, action was taken with a view to have adequate accommodation made available.

During the year ended the 30th June, 1910, new weighing machines were provided at the Ballinrobe, Ballymote, Castlebar

INSPECTIONS.

Gort and Granard fairs, and at two auction marts—the one at Dundalk and the other at Strabane—and various improvements were effected in the accommodation for weighing cattle at the fairs held at Birr, Carrick-on-Shannon, Castleisland, Charlestown, Clifden, Miltownmalbay and Mohill.

Orders exempting market authorities and auctioneers from the obligation of providing sufficient and suitable EXEMPTION ORDERS. accommodation for weighing cattle were issued by the Department during the twelve months ended the 30th June, 1910, in respect of twenty-five fairs and six auction marts. A list showing the fairs and auction marts will be found in the Appendices, page 442.

I have the honour to be,  
Your Excellency's faithful servant,  
T. W. RUSSELL,  
*Vice-President,*

T. P. GILL,  
*Secretary.*

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET,  
DUBLIN, 21st March, 1911.

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## ACCOUNTS.

## PARLIAMENTARY GRANT.

[Moneys voted by Parliament to defray the Administrative Expenses of the Department, and Expenses connected with the maintenance of the National Museum, National Library of Ireland, Metropolitan School of Art, Royal Botanic Gardens, Royal College of Science, and Geological Survey of Ireland; and to provide for the payment of Grants to Schools and Classes of Science and Art and Technical Instruction, and Grants in Aid under the Diseases of Animals Act, under Sec. 15 (d & f) of the Agriculture and Technical Instruction (Ireland) Act, 1899, and to the Congested Districts Board for Ireland under 62 & 63 Vic., cap. 18, s. 5, and 9 Edw. 7, cap. 42, s. 49.]

## ACCOUNT OF PARLIAMENTARY GRANT in the Year ended 31st March, 1910.

RECEIPTS.			PAYMENTS.		
	£	s. d.		£	s. d.
Parliamentary Grant	267,541	0 0	Salaries and Wages,	50,197	7 9
Appropriations in Aid	1,838	2 3	Travelling,	9,858	10 0
			Special Services and incidental ex- penses,	3,682	2 18
			Collection of Agricultural and Trade Statistics,	1,410	17
			Grants in Aid, under Sec. 15 (d) and (f) of the Agriculture and Techni- cal Instruction (Ireland) Act, 1899, and sec. 49 of the Irish Land Act, 1909	22,425	0 0
			Diseases of Animals—Grants in Aid,	10,889	0 0
			INSTRUMENTS OF SCIENCE AND ART.		
			Salaries and Wages,	30,971	7 10
			Purchase of Specimens for Museum— (Grant in Aid),	2,930	0 0
			Purchase of Books for National Lib- rary—(Grant in Aid),	1,300	0 0
			Furniture, materials, &c., and fitting up of objects,	2,165	4 8
			Royal College of Science—Purchase of Spectra, Books, Apparatus for Laboratories, &c. (Grant in Aid),	1,500	0 0
			Royal College of Science—Fees, Scholarships and Bursaries,	3,057	18 3
			School of Art—Accessories and Models, Materials, &c.,	598	12 10
			School of Art—Fees, &c.,	569	0 1
			Botanic Gardens—Purchase of Seeds, plants, books, timber and garden manures,	759	11 5
			Travelling,	665	5 0
			Incidental Expenses,	622	12 0
			SCHOOLS OF SCIENCE AND ART, &c.		
			Annual Grants to Schools and Classes of Science and Art and Technical Instruction,	55,952	11 0
			Grants for Drawing and Manual In- struction in Miscellaneous Schools,	1,689	8 11
			Grants for Day Secondary Schools,	27,472	11 11
			GEOLOGICAL SURVEY OF IRELAND.		
			Salaries,	1,680	18 0
			Travelling,	307	4 1
			Incidental Expenses,	47	2 1
			Congested Districts Board—Grant in Aid, 62 & 63 Vic., cap. 18 s. 5, and 9 Edw. 7, cap. 42, s. 49	58,598	0 0
			Tobacco Growing Experiments (Grant in Aid),	6,600	0 0
			Fecundity Operations	4,132	18 1
			Balance on 31st March, 1910,	267,541	12 10
				1,453	9 5
Total,	269,377	2 3	Total,	269,377	2 3

## SUSPENSE ACCOUNTS.

	Balance on 1st April, 1909.	Receipts in 1909-1910.	Payments in 1909-1910.	Balance on 31st March, 1910.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Purchase of Specimens for Museum (Grant in Aid Fund)	341 2 5	2,300 0 0	2,072 7 8	568 14 9
Purchase of Books for National Library (Grant in Aid Fund)	326 13 11	1,300 0 0	1,427 1 11	199 12 0
Royal College of Science—Purchase of Specimens, Books Apparatus for Laboratories, &c. (Grant in Aid Fund)	1,073 9 9	1,500 0 0	1,247 10 11	1,325 18 10
Tobacco Growing Experiments (Grant in Aid Fund)	—	6,000 0 0	2,326 12 2	3,673 7 10
His Majesty's Stationery Office,	4 5 5	18 17 7	21 3 6	1 19 6
Local Science and Art Scholarships and Exhibitions,	75 0 0	116 11 0	136 11 0	55 9 0
Examination fees—South Kensington,	—	177 16 6	177 16 6	—
Students' deposits—Royal College of Science,	50 13 9	19 0 0	18 0 0	51 13 9
National Competition Awards,	—	5 0 0	5 0 0	—
Board of Trade—Census of Production,	2 11 4	—	2 11 4	—
Total,	1,873 16 7	11,437 5 1	7,434 15 0	5,876 6 8

**GENERAL CATTLE DISEASES FUND (IRELAND), INCLUDING**  
**Account of Receipts and Payments in respect of the GENERAL**  
**PNEUMONIA ACCOUNT (IRELAND), for the Year ended 31st**

RECEIPTS.			
	£	s.	d.
Balance on 1st April, 1906—			
General Cattle Diseases Fund (Ireland), . . . .	4,549	5	6
Cattle Plague-Pneumonia Account for Ireland, . . . .	—		
			4,549 5 6
GENERAL CATTLE DISEASES FUND (IRELAND) (57 and 58 Vict., cap. 57, sec. 71 (10)—			
Assessments on Local Authorities, . . . . .	15,582	8	10
Proportion of Fines, . . . . .	314	13	0
			15,897 2 4
CATTLE PLAGUE-PNEUMONIA ACCOUNT FOR IRELAND OF THE GENERAL CATTLE DISEASES FUND—			
Parliamentary Grant-in-Aid of the Account, under the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57), for general expenses, including special expenditures for the protection of imported cattle, . . . .	100	0	0
Parliamentary Grant-in-Aid of the Account, for the costs of the execution of the Diseases of Animals Act, 1894 (57 and 58 Vict., c. 57), as respects Strain Fever, . . . .	10,000	0	0
Parliamentary Grant-in-Aid of the Account, as respect of expenses in connection with the suppression of Rabies, . . . .	100	0	0
			10,200 0 0
Salvage, . . . . .			1,505 4 6
Transferred from the General Cattle Diseases Fund (57 and 58 Vict., c. 57, section 73 (3)), . . . .			3,570 0 10
Total, . . . . .			487,831 15 2

## THE CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND.

CATTLE DISEASES FUND (IRELAND), including the CATTLE PLEURO-March, 1910.

PAYMENTS			
		£ s. d.	£ s. d.
GENERAL CATTLE DISEASES FUND (IRELAND)—			
Repayments to Local Authorities (87 and 88 Vict. c. 37, sec. 71 and 72)		7,820 20 6	
Fees		28 17 6	
Travelling Expenses,		7 18 7	
Miscellaneous Expenses,		300 0 2	
Transferred to Cattle Pleuro-Pneumonia Account for Ireland (87 and 88 Vict. c. 37, sec. 73 (3)),		3,670 0 10	
			11,727 16 7
CATTLE PLEURO-PNEUMONIA ACCOUNT FOR IRELAND OF THE GENERAL CATTLE DISEASES FUND—			
General Expenses—			
Salaries (including the pay of the staff employed in cleaning, disinfection, branding, &c.),		6,742 11 3	
Fees,		188 5 6	
Travelling Expenses,		1,777 18 6	
Compensation to owners of slaughtered Swine,		3,719 16 0	
Miscellaneous (including the cost of requisites for cleaning and disinfection, and casual labour in killing, burying, branding and removal of animals, and other petty expenses),		224 4 2	
			12,273 14 1
Salaries Expenses—			
Salaries and Fees,		—	
Travelling,		1 0 3	
Miscellaneous Expenses,		0 2 0	
			1 11 3
Balance 31st March, 1910—			
General Cattle Diseases Fund (Ireland),		10,818 11 2	
Cattle Pleuro-Pneumonia Account for Ireland,		—	10,818 11 2
Total,			217,831 18 8

[Fund administered by the Department, in concurrence with (except as regards certain special sums mentioned in Section 16 Fisheries and other Industries, and Technical Instruction; and 63 Vict., ch. 50, and other Acts.)]

Account of NET RECEIPTS AND PAYMENTS by the Department in 1910.

Section of Act, 62 & 63 Vict., c. 50	RECEIPTS.	£ s. d.		
	Balance on 1st April, 1909, . . . . .	38,639	19	6
	Parliamentary Grants—			
15 (4.)	Sums payable as an equivalent for the Salaries attached to Judgeships obtained, &c., in pursuance of the Supreme Court of Judicature (Ireland) (No. 2) Act, 1897, 60 and 61 Vict., c. 64, . . . . .	12,000	0	6
15 (5.)	Sums representing the amount of expenses formerly paid out of Parliamentary Grants in connexion with instruction given in England in Agriculture, exclusive of such instruction given in Elementary National Schools, . . . . .	6,900	0	0
—	Grant in Aid under Sec. 45 of the Irish Land Act, 1903, 2 Edw. 7, c. 42, . . . . .	4,625	0	0
	Local Taxation (Ireland) Account—			
15 (4.)	Sums formerly payable to the Commissioners of National Education under the Local Taxation (Customs and Excise) Act, 1890, 53 and 54 Vict., c. 60, sec. 3, . . . . .	78,993	0	0
—	Sums payable under the Agriculture and Technical Instruction (Ireland) (No. 2) Act, 1902, 2 Edw. VII., c. 53, . . . . .	3,000	0	0
15 (6.)	Irish Church Temporalities Fund—Annual sums payable, . . . . .	70,000	0	0
15 (6.)	Sea and Coast Fisheries Fund—64 and 55 Vict., c. 43, s. 25 (5), Loans Repayments, &c., . . . . .	3,857	4	10
—	Interest on Securities and on Money deposited . . . . .	9,034	5	6
—	Proceeds of sale of Securities, . . . . .	28,842	17	0
—	Contribution from Ireland Development Grant (Grant in Aid), 2 Edw. VII., c. 22, for the purposes of Technical Instruction, . . . . .	7,000	0	0
—	Contribution from Ireland Development Grant for Arlow Harbour Extension, . . . . .	4,250	3	6
—	Contributions payable by Congested Districts Board in respect of Agricultural Schemes transferred to Department, . . . . .	1,584	4	11
—	Suspense Account . . . . .	42	2	5
—	Marine Works, . . . . .	215	9	4
—	Loans for Bells, Stationers, Posters, &c., and for Agricultural Credit Societies (Repayments), . . . . .	13,173	5	0
	Total, . . . . .	2261,993	3	9



## FUND.

the Agricultural Board and the Board of Technical Instruction of the Act a, b, d, e, f), for the purposes of Agriculture, Agriculture and Technical Instruction (Ireland) Act, 1899, 62

respect of the ENDOWMENT FUND for the Year ended 31st March,

Section of Act, 62 & 63 Vol. c. 59.	PATRONS.			
		£	s.	d.
18-1 (a)	Buildings, fittings, and appliances, Royal Veterinary College of Ireland.	1,425	5	2
" (b)	Purchasing and stocking additional land, and providing suitable buildings, fittings and appliances for the Marine Institute.	53	13	11
" (c) 1.	Grants sanctioned with the concurrence of the Board of Technical Instruction—			
" (d) 1.	County Boroughs, elsewhere than County Boroughs and making repairs and collecting, &c., information for the purposes of Technical Instruction.	41,184	10	8
"	Related Development Grant; Grant in Aid for the purposes of Technical Instruction.	42,730	8	9
18-1 (d)	Sea Fisheries.	7,404	19	10
"	Seamen Reserve Fund.	6,562	9	10
15 (c)	Artillery Harbour Extension—Related Development Grant, Sea and Coast Fisheries Fund, 54 and 55 Vol. c. 48 (Advances).	14	6	2
18-1 (e)	Superintendence of Officers transferred from National Education Office.	4,019	17	11
" (f)	Travelling and Subsistence of Members of the Council and Boards.	5,170	7	1
"	Darwin Scholarship Fund.	494	13	0
"	Darwin Scholarship Fund.	591	17	10
(g) 18-1	Grants sanctioned with the concurrence of the Agricultural Board—	119	4	2
	Agriculture and other Rural Industries (including Expenses incurred under Section 17)—			
	Agricultural Instruction:			
	Albert Agricultural College.	2,695	10	11
	Marine Institute.	2,343	1	4
	Albany Agricultural Station.	1,746	11	0
	Ballyhane do.	2,029	10	3
	Glendalough do.	1,483	12	4
	Under Bury School.	1,416	9	1
	Agricultural Schools and Classes.	4,385	1	10
	Royal College of Science.	1,966	12	5
	Elementary Instruction.	7,125	19	6
	Practical Lectures, Judging of Farms, &c.	1,735	8	7
	Poultry.	2,341	17	9
	Improvement of Live Stock.	7,874	8	3
	Insurance of Live Stock.	24	15	0
	Special Assistance to Agricultural and other Shows.	966	7	11
	Votes to County Committees:			
	Live Stock Salesmen.	11,416	15	11
	Other Agricultural Salesmen.	16,880	3	2
	Shows.	4,666	5	5
	General Administration.	5,353	13	30
	Improvement of Cattle, Sheep, Poultry, Swine, &c.	4,073	9	4
	Lease for Sale, Stables, Fences, Specular, Valuing, &c., Rural Veterinary, &c., and to Agricultural Credit Societies (Advances).	13,089	18	0
	Consolidated District Scheme.	8,145	5	6
	Special Investigations.	5,957	11	6
	Rural and other Industries.	2,167	15	0
	Sea and Inland Fisheries.	2,511	19	6
	Travelling of Members of Special Commissions.	15	9	8
	Expenses in connection with Fairs and Feeding Trials, Food and Dress, and other Acts.	1,680	11	11
	Intest of Irish Agricultural Produce in Great Britain.	2,632	11	5
	Exhibitions of Irish Produce.	563	5	8
	Miscellaneous Expenses.	5,362	8	9
		222,164	17	0
	BALANCE ON 31st MARCH, 1910.	40,823	6	9
	Total.	458,193	3	9

\* This sum includes a Grant of £5,000 from the Agricultural Board expended on Marine Instruction and the teaching of Domestic Economy in Rural Districts.

DETAILS OF SPECIAL INVESTIGATIONS (ENDOWMENT FUND) for the  
Year ended 31st March, 1910.

	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Flax Scheme, . . . . .	1,331 0 4	540 7 0	990 13 4
Feeding Experiments (pigs, calves, &c.), . . . . .	—	19 2 8	*19 2 8
Cheese-making Experiments, . . . . .	3 19 6	—	3 19 6
Poultry Industry, . . . . .	5,116 14 5	4,177 6 10	939 7 7
Potatoes, . . . . .	304 6 11	1 10 5	304 16 6
Horticulture, . . . . .	936 13 8	41 12 8	895 1 0
Tobacco Growing, . . . . .	613 6 2	—	613 5 2
Seed Testing, . . . . .	301 14 2	29 0 0	272 14 2
Implements for Experiments, . . . . .	50 6 1	—	50 6 1
Purification of Creamery Sewage, . . . . .	—	60 0 0	*60 0 0
Barley Experiments, . . . . .	473 6 8	—	473 6 8
Wheat Experiments, . . . . .	199 1 7	12 4 1	186 17 6
Winter Dairying Scheme . . . . .	156 3 10	—	156 3 10
Cattle Mortality (Diseases in Farm Animals; Royal Veterinary College Grant; Warble Experi- ments), . . . . .	679 5 8	0 11 0	678 14 5
Technical Aid to Industries (Cider Making, Dead Meat Trade, &c.), . . . . .	10 15 6	49 0 0	*29 6 6
Nitrogen tests, &c., . . . . .	10 15 10	—	10 15 10
Total, . . . . .	10,889 6 2	4,921 14 8	6,467 11 6

\* Receipts.

SUMMARY OF LOAN ACCOUNTS ON 31st March, 1910.

Nature of Loans.	Loans outstanding on 31st March, 1909.		Loans issued in 1909-10.		Principal repaid in 1909-10.	Interest received in 1909-10.	Loans outstanding on 31st March, 1910.	
	No.	Amount.	No.	Amount.			No.	Amount.
		£ s. d.		£ s. d.	£ s. d.	£ s. d.		£ s. d.
For the purchase of Bulls, . . . . .	338	4,190 13 8	190	4,405 8 2	4,344 8 8	149 15 4	334	4,350 15 2
For the purchase of Stallions, . . . . .	78	4,688 16 2	22	1,819 13 4	1,637 11 4	107 6 11	82	4,826 15 2
To Agricultural Credit Societies, . . . . .	161	11,547 10 0	7	925 0 0	2,149 10 0	345 5 11	137	10,623 0 0
For the erection of Fenc- ing, . . . . .	694	1,640 6 0	62	1,114 0 0	317 15 4	60 3 7	165	2,436 10 6
For the erection of Fenc- ing, . . . . .	2	172 1 2	—	—	15 10 7	9 18 9	1	152 0 0
For Rural Sanitation, . . . . .	39	354 18 11	27	218 2 6	105 11 4	6 16 7	66	371 10 1
For House Springing Machinery, . . . . .	89	806 16 0	15	112 16 6	304 18 2	25 11 1	101	617 16 4
For Industrial Develop- ment, . . . . .	3	2,586 0 0	—	—	21 9 6	1 7 13	3	2,564 11 3
For erection of Village Halls, . . . . .	4	1,283 0 0	1	819 0 0	145 0 0	20 2 3	3	1,390 0 0
For repairing and equip- ping school Halls, . . . . .	2	240 0 0	—	—	60 0 0	2 14 2	2	180 0 0
Total, . . . . .	908	20,483 2 8	312	8,686 2 6	9,602 15 7	714 18 4	884	28,842 19 3

SEA AND COAST FISHERIES FUND LOANS.

Amount of Preliminary Notes outstanding on 31st March, 1910, £11,019 0 1

BULLS SOLD UNDER SPECIAL SCHEME FOR CORRELATED DISTRICTS:

Markdown sum outstanding for 31 bulls sold, . . . . . £3,846 0 0

redeemable if certain conditions are complied with to . . . . . £438 0 0

DETAILS OF MISCELLANEOUS EXPENSES (ENDOWMENT FUND) for the  
Year ended 31st March, 1910.

Sub-Head.	Gross Ex- penditure.	Receipts.	Net Ex- penditure.
	£ s. d.	£ s. d.	£ s. d.
Journal and Leaflets, . . . . .	563 12 9	—	563 12 9
Technical and clerical Assistance, . . . . .	2,705 7 3	—	2,705 7 3
Transit of Produce, . . . . .	320 5 5	—	320 5 5
Motor Service, . . . . .	180 7 0	1 0 0	179 7 0
Circulating School Exhibits, . . . . .	628 15 8	0 0 9	628 14 11
Erection of Notice Boards, carriage of leaflets, &c., . . . . .	20 17 5	—	20 17 5
Railway, &c., Rates Inquiries, . . . . .	421 6 8	—	421 6 8
Travelling of candidates tested for ap- pointments, . . . . .	157 6 4	—	157 6 4
Village Libraries, . . . . .	32 13 0	—	32 13 0
Village Halls, . . . . .	100 0 0	—	100 0 0
Inspection of Agricultural Credit Societies, . . . . .	107 18 7	—	107 18 7
Law Charges (execution of loan bonds, &c.), . . . . .	55 3 0	1 19 0	54 4 0
General, . . . . .	15 15 11	45 0 6	*29 4 7
Total, . . . . .	5,310 9 0	48 0 3	5,262 8 9

\* Nil receipt.

STATEMENT OF SECURITIES HELD ON 31st MARCH, 1910: FUND FOR WHICH SECURITY IS HELD

	£	s.	d.	
Local Loans Stock . . . . .	100,000	0	0	.. Endowments
Guaranteed Land Stock (Mature) . . . . .	67,832	13	4	.. ditto,
Guaranteed 2½ % Stock, 1903 . . . . .	38,566	19	1	.. ditto,
Cash . . . . .	30,000	0	0	.. ditto,
Total . . . . .	227,446	11	5	

DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

COUNCIL AND BOARDS, 1910.

- I.—COUNCIL OF AGRICULTURE.  
Arranged in Alphabetical Order according to Provinces.  
II.—COUNCIL OF AGRICULTURE.  
Arranged according to Counties, &c.  
III.—AGRICULTURAL BOARD.  
IV.—BOARD OF TECHNICAL INSTRUCTION.  
V.—CONSULTATIVE COMMITTEE OF EDUCATION.

I.—COUNCIL OF AGRICULTURE, 1910.

[104 Members, including the President and Vice-President.]  
Arranged in Alphabetical Order according to Provinces.

LEINSTER (36 Members).

Name.	Address.
Bolger, John.	Ferna, Co. Wexford.
Brisson, Algernon T. F., J.P.	Curristown House, Kildare, Co. West- meath.
Brown, Stephen J., M.A., J.P.	Ard Caisin, Nass, Co. Kildare.
Bryan, Captain Loftus A., J.P., D.L.	Upton, Goney, Co. Wexford.
Butler, John, J.P.	Minerva, Callan, Co. Kilkenny.
Byrne, Thomas J., J.P.	Roomakea, Dundalk, Co. Louth.
Carew, Thomas M.	Kildangan, Kinsrard, Co. Westmeath.
Cogan, Denis J.	115, Thomas-street, Dublin.
Corbett, William M.	Kilbegg, Tullamore, King's County.
Delany, Thomas W.	Longford.
Dodley, James G.	Hoochgrove, Rosbercon, New Ross, Co. Wexford.
Downes, Robert, J.P.	Russellstown, Mullingar, Co. West- meath.
Everard, Colonel Nugent T., H.M.L.	Randlesdown, Navan, Co. Meath.
French, Peter, J.P., M.P.	Harcourtstown, Bridgetown, Wexford.
Field, William, M.P.	Blackrock, Co. Dublin.
Finlay, Rev. T. A., M.A.	85, Lower Leeson-street, Dublin.
FinGerald, The Right Hon. Lord Frederick, J.P.	Carton, Maynooth, Co. Kildare.
Galvin, James.	Mount Avon, Rathdrum, Co. Wicklow.
Harlan, Patrick.	Grange-farthy, Carlow.
Horns, Michael J., J.P.	Mile Tree, Birr, King's County.
Kavanagh, Walter M.M., J.P., D.L.	Borris House, Borris, Co. Carlow.
Kennedy, Patrick J., J.P.	Rathore House, Enfield, Co. Meath.
King, Nicholas B., J.P.	Knockdillon, Knockbridge, Dundalk, Co. Louth.
McCarthy, James, J.P.	Newfoundwell, Drogheda, Co. Louth.
MacMahon, James, J.P.	Ballyrean, Abberley, Queen's County.
Massaroene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P.	Oriel Temple, Colton, Co. Louth.
Meehan, Patrick A., J.P., M.P.	Maryborough, Queen's County.
Minch, Matthew J., J.J.	Rockfield House, Athy, Co. Kildare.

## COUNCIL OF AGRICULTURE.

## LEINSTER—Continued.

Name.	Address.
Mooney, Joseph, J.P.	Cabra Lodge, Cabra, Co. Dublin.
Murphy, George F., J.P.	The Grange, Dunsany, Co. Meath.
O'Neill, Patrick J., J.P.	Kessey House, Malahide, Co. Dublin.
Peacocke, Charles H., J.P.	Balmont, Wexford.
Reynolds, Henry.	Balmaleole, Edgewoodstown, Co. Longford.
Ronaldson, William R.	Barn Hall, Leixlip, Co. Kildare.
Ross, James, J.P.	Newport, Lonsmead, Co. Longford.
Wallace, Hugh.	13, D'Olier Street, Dublin.

## ULSTER (27 Members).

Name.	Address.
Andrews, The Right Hon. Thomas, P.C., D.L.	Ardara, Comber, Co. Down.
Baile, William	Martray Manor, Ballygawley, Co. Tyrone.
Barbour, Frank.	Annelbrook, Mullingar, Co. Westmeath.
Barbour, Harold A. M., M.A.	Strathmore, Dunmurry, Co. Antrim.
Barnes, Hugh T., J.P., M.P.	Manor House, Coleraine, Co. Londonderry.
Campbell, Rev. E. F., M.A.	Killyman Rectory, Moy, Co. Tyrone.
Clark, Alexander L., J.P.	Moyola Lodge, Castledawson, Co. Londonderry.
Davison, Joseph.	Ballygry, Co. Londonderry.
Huston, Robert T., M.B.C.V.S.	The Mall, Armagh.
Jordan, Jeremiah, M.P.	Eniskillen, Co. Fermanagh.
Kearney, John, J.P.	Leitrim, Castledawson, Co. Londonderry.
Lynch, Francis J.	Ballyjamesduff, Co. Cavan.
McCauley, John S. F., J.P.	Woodbourne, Dunmurry, Co. Antrim.
McClure, Thomas A., J.P.	Ross Lodge, Killylea, Co. Armagh.
McGlynn, The Rt. Rev. Monignor, P.P., V.G.	Parochial House, Stranorlar, Co. Donegal.
McKenna, T. P., J.P.	Mullagh, Kells.
Monaghan, H. de F., J.P., D.L.	Hessingbourne, Fivemiletown, Co. Tyrone.
Murphy, George, J.P.	Loseelly House, Omagh, Co. Tyrone.
O'Clairin, Rev. Loran, P.P.	Rockmurry, Co. Monaghan.
Patrick, Captain John, J.P.	Dunmurry, Glarryford, Co. Antrim.
Porter, John Porter, J.P., D.L.	Bellisle, Loughlin, Co. Fermanagh.
Reade, Robert H. S., J.P., D.L.	Wilmont, Dunmurry, Co. Antrim.
Shannon-Crawford, Colonel R. G., J.P., D.L.	Crawfordburn, Co. Down.
Shank, Michael, J.P.	Springhill Farm, Bangor, Co. Down.
Smyth, William, J.P.	Brookfield, Banbridge, Co. Down.
Stoney, Captain T. Butler, J.P., D.L.	Oakfield Park, Raphoe, Co. Donegal.
Teal, Thomas, J.P.	Smithboro', Monaghan.

## COUNCIL OF AGRICULTURE.

## MUNSTER (24 Members).

Name.	Address.
Byrne, James, J.P., . . . . .	Wallstown Castle, Castletownroche, Co. Cork.
Coghlan, Captain William C., J.P., . . . . .	Drumina, Roscuff, Co. Waterford.
Conery, Maurice, M.D., J.P., . . . . .	Kilfinane, Co. Limerick.
Conoran, Thomas, J.P., . . . . .	Honeymount, Roscrea, Co. Tipperary.
Cummins, Edmund, J.P., . . . . .	Brookhill, Fethard, Co. Tipperary.
Duggan, Thomas, . . . . .	The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.
Hogan, Patrick J., . . . . .	Cashel, Bodyke, Co. Clara.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross.	Bishop's House, Skibbereen, Co. Cork.
McDonald, William, J.P., . . . . .	Laharra, Milane Bridge, Carrigaline, Co. Cork.
Mesall, Michael, J.P., . . . . .	Dromahay, Coonacore, Co. Clara.
Moelair, Patrick, . . . . .	John-street, Cashel, Co. Tipperary.
Monteagle, The Right Hon. Lord, K.P., D.L., . . . . .	Mount Trenchard, Fynna, Co. Limerick.
Nolan, Michael J., J.P., . . . . .	Moyvane House, Newtownsandal, Co. Kerry.
Nugent, Edmund, J.P., . . . . .	Ballynacarbery, Clonmel, Co. Tipperary.
O'Callaghan, Cornelius, J.P., . . . . .	Altamont House, Millstreet, Co. Cork.
O'Dwyer, William White, J.P., . . . . .	Spring House, Ballylanders, Co. Limerick.
O'Gorman, David Leo, . . . . .	Janetville, Fersoy, Co. Cork.
O'Gorman, George, . . . . .	Kilknashan, Ballygar, Co. Kerry.
O'Mara, Alderman Stephen, . . . . .	Limerick.
Power, Thomas, . . . . .	Dungarvan, Co. Waterford.
Ryan, Hugh P., . . . . .	Roskeen, Thurles, Co. Tipperary.
Sheehy, Timothy, . . . . .	Market-street, Skibbereen, Co. Cork.
Slattery, Michael, . . . . .	Killark, Liscroagh, Clonmel, Co. Tipperary.
Trench, George F., J.P., . . . . .	Abbeylands, Ardfer, Co. Kerry.

## CONNACHT (15 Members).

Name.	Address.
Clonbeck, The Right Hon. Lord, K.P., H.M.L., . . . . .	Clonbeck, Ahazragh, Co. Galway.
Costello, P. J., J.P., . . . . .	Cloghanmore House, Cloghan Hill, Tuam, Co. Galway.
Daly, Very Rev. Canon, D.D., . . . . .	Diocesan College, Ballaghaderreen, Co. Mayo.
Digges, Rev. Joseph G., M.A., . . . . .	Cloonahis, Lough Ryan R.S.O., Co. Leitrim.
Flynn, Rev. Charles, P.P., . . . . .	Killarga, Dromahaire, Co. Leitrim.
Galvin, John, . . . . .	Mount Talbot, Roscommon.
Gore-Booth, Sir Joselyn, Bart., D.L., . . . . .	Lonsdale, Sligo.
Graffia, Thomas C., . . . . .	Garteen, Ballinaglos, Co. Galway.
Kennedy, Cornelius J., . . . . .	Dunmore, Co. Galway.
MacGuire, James P., . . . . .	Roskeer, Dromod, Co. Leitrim.
Manly, Rev. P. J., C.C., . . . . .	Garrick-on-Shannon, Co. Leitrim.
Moerin, Daniel, . . . . .	Forford, Co. Mayo.
Mulligan, Rev. Philip J., P.P., . . . . .	Carracastle, Ballaghaderreen, Co. Mayo.
Nolan, Colonel John P., J.P., . . . . .	Ballinderry, Tuam, Co. Galway.
O'Dowd, John, M.P., . . . . .	Bennanadden, Co. Sligo.

## II.—COUNCIL OF AGRICULTURE, 1910.

[104 Members, including the President and Vice-President.]

Arranged according to Counties, &c.

### LEINSTER (36 Members).

County.	Name.	Address.
Members appointed by County Councils.		
Carlow.	Kavanagh, Walter M.M., J.P. D.L., Hanton, Patrick.	Borris House, Borris, Co. Carlow. Geangaforth, Carlow
Dublin.	O'Neill, Patrick J., J.P., Mooney, Joseph, J.P.	Kinessy House, Malahide, Co. Dublin. Cabra Lodge, Cabra, Co. Dublin.
Kildare.	Brown, Stephen J., M.A., J.P. Minch, Matthew J., J.P.	Ard Caen, Naze, Co. Kildare. Rockfield House, Athy, Co. Kildare.
Kilkenny.	Butler, John, J.P., Dooley, James G.	Minsane, Collan, Co. Kilkenny. Hoodgrove, Busheroon, New Ross, Co. Wexford.
King's Co.	Horan, Michael J., J.P., Corbet, William M.	Mile Tree, Birr, King's County. Killeigh, Tullamore, King's County.
Longford.	Reynolds, Henry, Rosa, James, J.P.	Ballinalee, Edgeworthstown, Co. Long- ford Newport, Leamore, Co. Longford
Louth.	King, Nicholas B., J.P., McCarthy, James, J.P.	Knockdillon, Knockbridge, Dundalk, Co. Louth. Newfoundwell, Drogheda, Co. Louth.
Meath.	Everard, Colonel Nugent T., H.M.L. Kennedy, Patrick J., J.P.	Randlestown, Navan, Co. Meath. Rathore House, Enfield, Co. Meath.
Queen's Co.	Meehan, Patrick A., J.P., M.P. MacMahon, James, J.P., Devenee, Robert, J.P.	Maryborough, Queen's County. Ballyroan, Abbeylisle, Queen's Co. Renschtown, Mullingar, Co. West- meath.
Westmeath.	Brace, Algernon T. F., J.P.	Curranstown House, Killycuan, Co. West- meath
Wexford.	Peacocke, Charles H., J.P. Bolger, John.	Belmont, Wexford. Ferns, Co. Wexford.
Wicklow.	Cogan, Denis J., Galvin, James.	111, Thomas-street, Dublin. Mount Avon, Rathdrum, County Wick- low.

## COUNCIL OF AGRICULTURE.

## LEINSTER—Continued.

	Name	Address
Members appointed by the Department.		
	Bryan, Captain Loftus A., J.P., D.L.	Upton, Gorey, Co. Wexford.
	Byrne, Thomas J., J.P.	Bossmaken, Dunsink, Co. Louth.
	Carew, Thomas M., .	Kildangan, Kinnegad, Co. Wick.
	Deasy, Thomas W., .	Longford.
	French, Peter, J.P., M.P.	Harpoostown, Bridgetown, Wexford.
	Field, William, M.P., .	Blackrock, Co. Dublin.
	Finlay, Rev. T. A., M.A.,	35 Lower Leeson Street, Dublin.
	FitzGerald, The Rt. Hon. Lord Frederick, J.P.	Carton, Maynooth, Co. Kildare.
	Masserene and Ferrard, The Rt. Hon. Viscount, D.S.O., J.P.	Oriel Temple, Colton, Co. Louth.
	Murphy, George F., J.P.	The Grange, Dunsany, Co. Meath.
	Ronaldson, William R., .	Barn Hall, Leixlip, Co. Kildare.
	Wallace, Hugh, .	13, D'Oher Street, Dublin.

## ULSTER (27 Members).

County.	Name	Address
Members appointed by County Councils.		
Antrim,	Barbour, Harold A. M., M.A., Patrick, Captain John, J.P.	Sirathoeane, Dunmurry, Co. Antrim. Dunmanning, Glarryford, Co. Antrim.
Armagh,	Huston, Robert T., M.R.C.V.S. McClure, Thomas A., J.P.	The Mall, Armagh. Ross Lodge, Killylea, Co. Armagh.
Cavan,	McKeena, T. P., J.P., Lynch, Francis J., .	Mullagh, Kells. Ballyjamesduff, Co. Cavan.
Donegal,	Stoney, Capt. T. Butler, J.P., D.L. McGlynn, The Rt. Rev. Monsignor, P.P., V.G.,	Oakfield Park, Raphoe, Co. Donegal. Parochial House, Stranorlar, Co. Donegal.
Down,	Andrews, Rt. Hon. Thos., P.C., D.L. Smith, William, J.P., .	Ardara, Comber, Co. Down. Brookfield, Banbridge, Co. Down.
Fermanagh,	Porter, John Porter, J.P., D.L., Jordan, Jeremiah, M.P.,	Belleisle, Lisbellaw, Co. Fermanagh. Binnakillen, Co. Fermanagh.
Londonderry,	Barris, Hugh T., J.P., M.P., Keenan, John, J.P., .	Manor House, Coleraine, Co. Londonderry. Leitrim, Castledawson, Co. Londonderry.



## COUNCIL OF AGRICULTURE.

## ULSTER—Continued.

County.	Name.	Address.
Monaghan.	O'Clairin, Rev. Lucan, P.P.	Rodcorry, Co. Monaghan.
	Toal, Thomas, J.P.,	Smithboro', Monaghan.
Tyrone.	Montgomery, H. de F., J.P., D.L.	Bessingbourne, Fermanistown, Co. Tyrone.
	Murnaghan, George, J.P.,	Luanelly House, Omagh, Co. Tyrone.
Members appointed by the Department.		
	Baillie, William,	Martree Manor, Ballygawley, Co. Tyrone.
	Barbour, Frank,	Annesbrook, Mullingar, Co. Westmeath.
	Campbell, Rev. E. F., M.A.	Killyman Rectory, Moy, Co. Tyrone.
	Clark, Alexander L., J.P.	Moyola Lodge, Castledawson, Co. Londonderry.
	Davison, Joseph,	Bellaghy, Co. Londonderry.
	McCanse, John S. F., J.P.	Woodbourne, Dunsurry, Co. Antrim.
	Rende, Robert H. E., J.P., D.L.	Wilmont, Dunsurry, Co. Antrim.
	Shannon-Crawford, Col. E. G., J.P., D.L.	Crawfordshum, Co. Down.
	Sheffs, Michael, J.P.,	Springhill Farm, Bangor, Co. Down.

## MUNSTER (24 Members).

County.	Name.	Address.
Members appointed by County Councils		
Clare.	Hogan, Patrick J.,	Coolrugh, Bolyke, Co. Clare.
	Mesal, Michael, J.P.,	Dromedry, Co. Clare.
Cork.	O'Callaghan, Cornelius, J.P.	Altamont House, Millstreet, Co. Cork.
	McDonald, William, J.P.,	Laharan, Minane Bridge, Carrigaline, Co. Cork.
	O'Gorman, David Leo,	Janeyville, Fermoy, Co. Cork.
	Sheehy, Timothy,	Market-street, Skibbreen, Co. Cork.
Kerry.	O'Gorman, George,	Kilmeadan, Ballygar, Co. Kerry.
	Nolan, Michael J., J.P.,	Moyvane House, Newtownandes, Co. Kerry.
Limerick.	Convery, Maurice, M.D., J.P.	Kilfinane, Co. Limerick.
	O'Dwyer, William White, J.P.	Spring House, Ballylanders, Co. Limerick.
Tipperary, C.B.	Corcoran, Thomas, J.P.,	Honey Mount, Roscrea, Co. Tipperary.
	Duggan, Thomas,	The Castle, Two-Mile-Borris, Thurles, Co. Tipperary.

## COUNCIL OF AGRICULTURE.

## MUNSTER—Continued.

County.	Name.	Address.
Tipperary, S.E.	Slattery, Michael,	Killeek, Lisronagh, Clonmel, Co. Tipperary.
	McClair, Patrick,	John-street, Cashel, Co. Tipperary.
Waterford,	Power, Thomas,	Dungarvan, Co. Waterford.
	Nugent, Edmund, J.P.	Ballymacasherry, Clonmel, Co. Tipperary.
Members appointed by the Department.		
	Byrne, James, J.P.,	Wallstown Castle, Castletownrobin, Co. Cork.
	Coghlan, Captain Wm. C., J.P.	Dromina, Roseduff, Co. Waterford.
	Cummins, Edmund, J.P.,	Brookhill, Fethard, Co. Tipperary.
	Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross.	Bishop's House, Skibbereen, Co. Cork.
	Monteagle, The Right Hon. Lord, K.P., D.L.	Mount Trenchard, Foynes, Co. Limerick.
	O'Mara, Alderman Stephen.	Limerick.
	Ryan, Hugh P.,	Roskeen, Thurles, Co. Tipperary.
	Trench, George F., J.P.	Abbeystanda, Ardara, Co. Kerry.

## CONNACHT (15 Members).

County.	Name.	Address.
Members appointed by County Councils.		
Galway,	Giffin, Thomas G.,	Gastons, Ballinasloe, Co. Galway.
	Kennedy, Cornelius J.,	Dunmore, Co. Galway.
Leitrim,	Manly, Rev. F. J., C.C.	Carrick-on-Shannon, Co. Leitrim.
	Flynn, Rev. Charles, P.P.,	Killarga, Dromabara, Co. Leitrim.
Mayo,	Costello, P. J., J.P.,	Cloghansmore House, Cloghans Hill, Tuam, Co. Galway.
	Morris, Daniel,	Foxford, Co. Mayo.
Roscommon,	Galvin, John,	Mount Talbot, Roscommon.
	MacGuire, James P.,	Roskilly, Drumod, Co. Leitrim.
Sligo,	O'Dowd, John, M.P.,	Bunananadden, Co. Sligo.
	Daly, Very Rev. Canon, D.D.	Diocesan College, Ballaghaderreen, Co. Mayo.
Members appointed by the Department.		
	Closhcock, The Right Hon. Lord, K.P., H.M.L.	Closhcock, Ahascragh, Co. Galway.
	Duggan, Rev. Joseph G., M.A.	Closhchir, Lough Ryan R.S.O., Co. Leitrim.
	Gore-Booth, Sir Jocelyn Bart., D.L.	Lansdell, Sligo.
	Malligan, Rev. Philip J., P.P.	Carracashin, Ballaghaderreen, Co. Mayo.
	Nolan, Colonel John P., J.P.	Ballinderry, Tuam, Co. Galway.

## III.—AGRICULTURAL BOARD.

(14 Members \*)

Name.	Address.	By whom appointed.
Daly, Very Rev. Canon, D.D.	Diocesan College, Ballinacorney, Co. Mayo.	Connacht Provincial Committee.
Downes, Robert, J.P.,	Russellstown, Mullingar.	Leinster Provincial Committee.
Everard, Col. Nugent T., H.M.L.	Bandinstown, Navan, Co. Mon.	The Department.
Gore-Booth, Sir Jocelyn, Bart., D.L.	Lissadell, Sligo.	The Department.
Healy, His Grace The Most Rev. John, D.D., Lord Archbishop of Tuam	St. Jarlath's, Tuam, Co. Galway.	Connacht Provincial Committee.
Kelly, Most Rev. Denis, D.D., Lord Bishop of Ross	Bishop's House, Shalherreen, Co. Cork.	Munster Provincial Committee.
McCance, John S. F., J.P.	Woodbourne, Danmurry, Co. Antrim.	Ulster Provincial Committee.
McDonald, William, J.P.,	Laharra, Minane Bridge, Carrigaline, Co. Cork.	Munster Provincial Committee.
Monteagle, The Right Hon. Lord, K.P., D.L.	Mount Trenchard, Foyers, Co. Limerick.	The Department.
Montgomery, H. de F., D.L.	Blessingbourne, Fivemiletown, Co. Tyrone.	Ulster Provincial Committee.
Murnaghan, George, J.P.,	Lissadilly House, Omagh, Co. Tyrone.	The Department.
O'Neill, Patrick J., J.P.,	Kinsely House, Malahide, Co. Dublin.	Leinster Provincial Committee.

## IV.—BOARD OF TECHNICAL INSTRUCTION.

(23 Members. \*)

Name.	Address.	By whom appointed.
Barbour, Frank,	Annabrook, Mullingar, Co. Westmeath.	Ulster Provincial Committee.
Clancy, Most Rev. John, D.D., Lord Bishop of Elphin	St. Mary's, Sligo.	Connacht Provincial Committee.
Cramer, James, J.P., V.B.	36, Montpelier Hill, Dublin.	Dublin County Borough Council.
Dickson, Alexander,	15, Parliament street, Dublin.	Dublin County Borough Council.
Donnellan, Alderman Thomas	Limerick.	Limerick County Borough Council.
Dunn, Christopher J., J.P.	1, Mount Verdent-terrace, Wallington-road, Cork.	The Department.
Evans, Rev. Henry, D.D., M.R.I.A., F.R.H.	St. Helen's, Blackrock, Co. Dublin.	Commissioners of National Education.
Finlay, Rev. T. A. M.A.	35, Lower Leeson-street, Dublin.	Leinster Provincial Committee.
Glynn, Joseph A., B.A.	Beech House, Tuam, Co. Galway.	The Department.

\* By section 24 (3) of the Agriculture and Technical Instruction (Ireland) Act, 1880, the President and Vice-President of the Department are *ex-officio* Members of the Board.

## BOARD OF TECHNICAL INSTRUCTION—continued.

Name.	Address	By whom appointed.
Good, John, . . .	The Moorings, Merrion Road, Dublin.	Joint Committee of Councils of the Co. Dublin Urban Districts.
Henderson, Sir James, A.M., D.L.	Oakley House, Windsor-park, Belfast.	The Department.
Johnston, Sir John Barr, J.P.	Londonderry, . . .	Londonderry County Borough Council.
Macartney, William, J.P.,	33, Cliftonville-road, Belfast.	Belfast County Borough Council.
McClelland, John A., M.A., D.Sc., F.R.S.,	Rostrevor, Orwell Road, Rathgar, Co. Dublin.	The Department.
Merolier, Alderman Samuel T., J.P.	2, Mount Clifton, Cliftonville Road, Belfast.	Belfast County Borough Council.
O'Connell, Seaghan T.,	8, Belvedere-avenue, Dublin.	Dublin County Borough Council.
Power, Thomas . . .	Dangarvan, Co. Waterford.	Munster Provincial Committee.
Sheehan, Most Rev Richard A., D.D., Lord Bishop of Waterford and Lismore.	John's Hall, Waterford.	Waterford County Borough Council.
Sisk, Richard,	Evergreen Villas, Cork.	Cork County Borough Council.
Starkie, William J. M., M.A., Litt.D.	Tyrone House, Marlborough-street, Dublin.	Intermediate Education Board.
Taylor, Alexander,	131, Donegall-street, Belfast.	Belfast County Borough Council.

## V.—CONSULTATIVE COMMITTEE OF EDUCATION.

(8 Members.)

Name	Address	By whom appointed.
The Right Hon. T. W. Russell, P.C., Vice-President of the Department.	Department of Agriculture and Technical Instruction, Dublin.	Ex officio.
William J. M. Starkie, M.A., Litt.D.	Tyrone House, Marlborough-street, Dublin.	Commissioners of National Education.
Rev. T. A. Finlay, M.A.,	88, Lower Lonsay-street, Dublin.	Intermediate Education Board.
McClelland, John A., M.A., D.Sc., F.R.S.	Rostrevor, Orwell Road, Rathgar, Co. Dublin.	Board of Technical Instruction.
T. P. Gill,	Department of Agriculture and Technical Instruction, Dublin.	Agricultural Board.

## AGRICULTURE.

RETURNS showing the Number of Instructors, &c., employed in each County in connection with Agricultural Schemes during the year 1909-10.

County.	Agriculture.	Teachers of Agricultural Classes.	Poultry-keeping only.	Poultry-keeping and Butter-making.	Butter-making only.	Horticulture only.	Horticulture and Bee-keeping.	Bee-keeping only.
Antrim, . . .	1	(a)	1	—	—	—	1	—
Armagh, . . .	1	(a)	1	—	—	—	1	—
Carlow, . . .	1	(a)	—	1	—	—	1	—
Cavan, . . .	1	—	1	—	1	1	—	1
Clare, . . .	1	1	1	—	2	—	1	—
Cork, . . .	2	(a) 2	2	—	2	—	2	—
Donegal, . . .	1	—	—	2	—	—	1	—
Down, . . .	1	(a)	—	1	—	—	1	—
Dublin, . . .	1	—	—	—	—	—	—	—
Formanagh, . . .	1	(a)	1	—	—	—	1	—
Galway, . . .	1	(a)	—	1	1	—	1	—
Kerry, . . .	1	(a)	1	—	1	—	1	—
Kildare, . . .	1	—	1	—	1	1	1	—
Kilkenny, . . .	1	(a) 1	—	1	—	1	—	1
King's, . . .	1	(a)	1	—	1	—	1	—
Leitrim, . . .	1	(a)	—	—	1	—	—	—
Limerick, . . .	1	1	1	—	—	—	1	—
Londonderry, . . .	1	(a)	1	—	1	—	1	—
Longford, . . .	1	(a)	—	1	—	—	1	—
Louth, . . .	1	(a)	1	—	1	—	1	—
Mayo, . . .	1	1	—	1	2	—	1	—
Meath, . . .	1	(a) 1	1	—	1	—	1	—
Monaghan, . . .	1	—	1	—	1	—	1	—
Queen's, . . .	1	(a)	—	1	—	—	1	—
Rosecommon, . . .	1	(a)	—	2	—	—	1	—
Sligo, . . .	1	(a)	—	—	—	—	1	—
Tipperary (N.R.)	1	(a)	—	1	—	—	1	—
(S.R.)	1	(a)	—	1	—	1	—	—
Tyrone, . . .	2	(a)	1	—	—	—	1	—
Waterford, . . .	1	(a)	—	1	—	—	1	—
Westmeath, . . .	1	(a)	1	—	1	—	1	—
Wexford, . . .	2	(a)	1	—	1	—	1	1
Wicklow, . . .	1	—	1	—	1	—	1	—
	36	7	19	14	19	4	29	3

(a) The Instructors in Agriculture conducted classes in these Counties.

\* One Poultry Instructor for Clare, Leitrim, and Sligo.

TABLE showing by Counties the Agricultural Schemes adopted  
 tember, 1910; the amount allocated from the joint fund  
 allocation chargeable to local contributions and to the

County.	Minor- ant In- struction in Agri- culture.	Winter Agricul- tural Classes.	Poultry.	Butter Making.	Horti- culture and Bee- keeping.	Cottage and Farm Prizes.
	£	£	£	£	£	£
Antrim, . . .	410	100	482	—	149	—
Armagh, . . .	379	60	204	—	214	—
Carlow, . . .	295	70	151	80	164	—
Cavan, . . .	330	—	208	110	272	290
Clara, . . .	620	260	70	210	204	255
Cork, . . .	(a) 1,538	240	688	246	456	300
Donegal, . . .	350	—	505	140	226	600
Down, . . .	335	(b) 250	292	102	260	320
Dublin, . . .	320	—	—	—	—	50
Fermanagh, . . .	310	54	139	—	276	40
Galway, . . .	350	109	550	190	270	465
Kerry, . . .	310	—	380	160	203	—
Kildare, . . .	320	—	269	189	(c) 516	328
Kilkenny, . . .	353	250	270	104	279	142
King's, . . .	315	40	218	146	199	—
Leitrim, . . .	300	50	115	100	5	110
Limerick, . . .	(e) 672	135	337	—	198	162
Londonderry, . . .	320	100	236	164	200	200
Longford, . . .	286	34	262*	—	198	70
Louth, . . .	383	50	310	189	189	—
Mayo, . . .	509	75	575	260	(f) 280	280
Meath, . . .	(b) 650	200	326	149	247	716
Monaghan, . . .	350	—	309	87	228	133
Queen's, . . .	290	50	241*	—	162	121
Reconomon, . . .	330	80	404	210	220	237½
Sligo, . . .	300	60	101	—	205	—
Tipperary, N.R., . . .	360	200	270	93	245	150
Tipperary, S.R., . . .	425	100	302	45	182	248
Tyrone, . . .	625	180	269	142	240	180
Waterford, . . .	370	30	171	108	177	30
Westmeath, . . .	330	160	345	146	199	293½
Wexford, . . .	(k) 1,665	300	343	138	241	300
Wicklow, . . .	352	—	256	141	194	100
Totals, . . .	14,613	3,110	9,698	3,649	7,380	5,811

\* Includes Buttermaking.

(a) Includes 5468 for Prizes under Tillage Scheme.

(b) Includes grant of £250 from "Henry Trust Fund."

(c) Includes £160 for Tree planting, entirely from rate.

(d) Includes £60 for Dairy Cattle Scheme.

(e) Includes £233 Tillage Demonstration Scheme, £50 of which is a contribution from Limerick Endowment Fund.

by the several County Committees for the year ended 30th Sep-  
for the purpose of each Scheme and the proportions of the total  
Department's Grant respectively.

Live Stock.	Sub- sidies to Showers	Flax.	General Admin- istration, includ- ing Secretaries' salaries and expenses.	Totals.	Contri- bution from Rates.	Contri- bution from Depart- ment.	Rate raised.
£	£	£	£	£	£	£	£
1,100	275	250	380	3,197	1,328	1,874	(d)1,890
540	—	—	325	1,722	654	1,068	(m)740
265	100	—	170	1,395	455	840	650
045	200	—	285	2,340	951	1,389	1,000
750	200	—	245	2,754	961	1,793	(5960)
1,575	000	30	550	6,113	2,430	3,683	2,132
843	300	200	847	3,511	1,843	2,168	1,250
1,380	385	200	687½	(b)4,061½	1,589	(d)2,412½	(f)2,080
680	175	—	185	1,416	540	876	(m)812
437	153	20	196	1,826	636	990	930
075	270	—	275	3,385	1,274	2,111	1,828
780	—	—	590	3,733	773	1,360	1,162
575	240	—	305	2,772	1,300	1,572	1,400
(d) 785	280	—	280	2,753	1,150	1,610	1,454
431	100	—	265	1,714	673	1,042	927
580	80	—	180	1,320	448	872	578
865	150	—	274	(e)2,793	(e)1,158	1,635	950
720	205	100	265	2,510	1,032	1,478	1,211
293	144	—	168	1,447	553	894	592
344	124	—	210	1,790	688	1,111	800
750	250	—	(e) 395	3,455	1,242	2,213	1,213
837	300	—	389	3,814	1,605	2,209	(f)1,680
560	200	80	235	2,211	898	1,313	1,000
410	150	—	234	1,658	649	1,009	1,000
376	160	—	254	2,471½	908	1,563½	1,258
590	200	—	290	1,696	598	1,098	800
585	200	—	290	2,343	963	1,380	1,140
818	240	—	317	2,708	1,091	1,617	1,540
(e)1,110	200	100	500	3,916	1,444	2,472	1,710
305	50	—	205	1,455	535	920	538
700	275	—	215	2,573½	1,054	1,519½	1,308
805	360	—	305	3,957	1,625	2,332	1,477
570	137	—	282	2,622	810	1,812	1,063
23,084	0,784	980	9,432½	84,561½	33,215	51,346½	—

(f) Includes £40 for Demonstration Shelter Belts.

(g) Includes £75 for purchase of Sprayers for hiring purposes.

(h) Includes £300 Prizes under Tillage Farm Prize Scheme.

(i) Includes £30 entirely from Department's funds.

(k) Includes £50 for Veterinary Lectures, and £400 for Veterinary Dispensaries.

(l) Rate £d. in the £ } In all other cases the rate is ½d. in the £.

(m) " " " " }

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

## ROYAL COLLEGE OF SCIENCE, DUBLIN.

Session 1909-10.

SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE, FORESTRY,  
AND CREAMERY MANAGEMENT.

A limited number of scholarships will be offered in 1909 for competition among young men in Ireland who desire to acquire a thorough knowledge of technical Agriculture, and, in addition, one or more scholarships will be provided for students who intend to specialise in either Horticulture, Forestry or Creamery Management. Each scholarship includes—(1) free admission to the first year's course of instruction in the College, (2) one third-class railway fare to Dublin at the beginning of the session, and one third-class fare from Dublin at the end of the session, and (3) either of the following at the option of the Department—(a) a maintenance allowance of one guinea per week while in attendance at the Royal College of Science or elsewhere, as the Department may decide; or (b) free board and residence at one of the Department's institutions; in the latter case a small grant will be made to each student towards the cost of books and apparatus.

A scholarship is tenable for one year, but selected candidates must undergo a probationary course of one term of about three months. If satisfactory progress be made by the holder, the scholarship may be renewed for a second, for a third, and, in certain circumstances, even for a fourth year, to enable the student to complete his course.

The Department do not undertake to employ, or find employment for, students at the close of the period of training.

Holders of these scholarships will be subject to the regulations made from time to time at the Royal College of Science, and will be required to devote their whole time to the course of study prescribed for them by the Department.

Candidates, who should be between 18 and 30 years of age on the 1st September, 1909, must make application on a form, which may be obtained from the Registrar, Royal College of Science, Dublin, after the 1st February, 1909, and which should be returned not later than the 4th August, 1909.

Candidates must have been born in Ireland or have been resident in Ireland for three years immediately prior to the 1st June, 1909.

The examination will take place at the Metropolitan School of Art, Kildare-street, Dublin, on the 18th and 19th August, 1909, and at the Albert Agricultural College, Glasnevin, on the 20th August, commencing each day at 10.0 a.m. No expenses in connexion with attendance at this examination will be allowed.

Candidates will be tested in the following:—

## A.—ENGLISH.

- (1) Composition—to be tested by an essay.
- (2) Grammar—Etymology, and the principles of Syntax.
- (3) Literature—the following works:—(a) Macaulay, "Chloe"; (b) Goldsmith, "The Deserted Village"; (c) Coleridge, "The Ancient Mariner."

## B.—One of the following:—

LATIN;  
GREEK;  
FRENCH;  
GERMAN.



In these languages the papers will comprise—

- (1) Passages for translation from the following texts:—  
 Latin—Caesar, "De Bello Gallico" (Book IV.).  
 Irish—páirtíog ó Laois, "Aerop a tíne, 50 h-figiúir."  
 French—Xavier de Maistre, "Le Lepreux de la Cité d'Aoste."  
 German—Andersen, "Bilderbuch ohne Bilder."  
 (2) Easy passages for translation into English from other texts.  
 (3) Questions in Grammar—Accidence and the principal rules of Syntax.  
 (4) Short sentences for translation from English.

#### C.—MATHEMATICS.

- (1) Arithmetic—including elementary Mensuration.  
 (2) Algebra—to quadratic equations inclusive.  
 (3) Plane Geometry—to be tested partly by questions requiring formal proofs of propositions from Euclid I.-III., and partly by practical problems to be solved by compasses and scale of equal parts.

#### D.—PRACTICAL EXPERIENCE OF ONE OF THE FOLLOWING:—

AGRICULTURE;  
 HORTICULTURE;  
 FORESTRY;  
 DAIRYING AND CREAMERY MANAGEMENT.

Each applicant must have had substantial experience of practical work in connexion with farming, gardening, the management of woodlands, or dairying and creamery management. The examination may be written, oral and practical. The subjects will include all the ordinary work of farms, gardens, woods, or dairies, as practised in Ireland.

*N.B.*—On no account will a scholarship be awarded to a candidate who fails to attain a high standard in the subject he selects for this portion of the examination; while excellence in that subject will be taken into consideration in case of deficiency in one or more of the others.

#### E.—ABILITY TO IMPART INSTRUCTION:—

Gauged by the style of the answers in both the written and the oral examinations.

Candidates who are qualified for scholarships by their examination on the foregoing subjects will be required to submit to an examination by a medical officer appointed by the Department. A scholarship will not be awarded in any case where the candidate is certified to be physically unfit to undertake the prescribed course of studies.

Last date for receiving applications, 4th August, 1909.

December, 1908.

#### SCHOLARSHIPS IN AGRICULTURE, HORTICULTURE, FORESTRY, AND CREAMERY MANAGEMENT.

1909-10.

At the annual examination held on the 18th, 19th, and 20th August, 1909, for Scholarships in Agriculture, Horticulture, Forestry and Creamery Management, tenable at the Royal College of Science, Dublin, fifty-three candidates presented themselves.

Scholarships in Agriculture were awarded to the following ten candidates :—

Caffrey, Michael, Albert Agricultural College, Glasnevin.  
 Curran, Daniel J., Albert Agricultural College, Glasnevin.  
 Duff, James John, Ballyvaughan, Lurgan.  
 Duke, John M. J., Albert Agricultural College, Glasnevin.  
 Hassett, John Joseph, Quin, Co. Clare.  
 Henderson, Geo. L., Albert Agricultural College, Glasnevin.  
 Hewitt, Thos. R., Crossgar, Co. Down.  
 Lafferty, Henry A., Albert Agricultural College, Glasnevin.  
 McLean, Wilfred, Albert Agricultural College, Glasnevin.  
 Mullally, Michael J., Mullinahone, Co. Tipperary.  
 O'Connell, Timothy, Coachford, Co. Cork.

A Scholarship in Horticulture was awarded to—

Turner, Edmund, Albert Agricultural College, Glasnevin.

No scholarships were awarded in Forestry or Creamery Management.

Form A. 180 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
 FOR IRELAND.

THE ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

Session, 1909-10.

The Albert Agricultural College is situated on the north side of Dublin in a healthy situation about 170 ft. above the sea level. It is easily reached by tram to the Glasnevin terminus, from which it is distant less than a mile. The College consists of a residence for between fifty and sixty students, together with a farm, orchard, and gardens, all covering an area of about 180 acres.

The College provides two distinct courses of instruction—one for farmers, the other for gardeners. The former or Agricultural Course occupies in the Department's scheme of agricultural education a position intermediate between the instruction given at the Agricultural Stations and that provided by the agricultural faculty at the Royal College of Science, Dublin. The Horticultural Course is intended for selected pupils who are seeking to qualify for the post of Instructor in Horticulture. (For particulars relative to the Horticultural Course see separate leaflet, A 153a.)

AGRICULTURAL COURSE.

This course is intended for young men who desire a technical and practical knowledge of agriculture, to fit them for entrance to the Royal College of Science, Dublin, for becoming farmers, or for engaging in any other occupation—such as creamery management—which requires technical training in the sciences underlying agriculture. It includes instruction in agriculture in the classroom, farmyard, and fields, supplemented by lessons in dairying, horticulture, poultry management, beekeeping, and veterinary hygiene. The elements of physics, chemistry, botany, zoology, and entomology are taught so far as is necessary to the proper understanding of the principles underlying the most approved farm practice.

Instruction is also given in bookkeeping, surveying, and woodwork, while literature, mathematics, and drawing receive such attention as is found requisite.

Every encouragement is given to the pursuit of athletics and to the development of social intercourse among the students.

The College discussion society meets frequently throughout the session. The papers read before it relate to topics of current interest to the farming community.

The library is supplied with standard works on agriculture, and copies of the best farming periodicals are procured regularly for the students' use.

**THE STAFF.**—The staff consists of Principal, House Masters, Agriculturist, and teachers of chemistry, botany, zoology, veterinary hygiene, horticulture, dairying, poultry keeping, beekeeping, and woodwork. A competent Drill Instructor attends twice weekly to see to the physical training of the students.

The Clergy of the different denominations also visit the College weekly to give religious instruction. The domestic comfort and bodily health of the students are under the care of an experienced Matron.

**THE SESSION.**—The course of study extends over at least one session. The session for the year 1909-10 will open on Tuesday, the 12th October, 1909, and end on Friday, the 12th August, 1910. There will be two intervals, each of about a fortnight, during which students will return to their homes—one at Christmas and the other at Easter.

**COLLEGE DIPLOMA.**—The College diploma is awarded partly on the result of the sessional examinations and partly on the work done throughout the year. It is of two classes, the first being reserved for those students who add to an intelligent grasp of scientific principles a high standard of skill in practical farm work.

Prizes are given by the Department for progress made, for work done, and for services cheerfully rendered to the common weal. These prizes are awarded after consultation with the Principal, and not merely on marks obtained at the examination.

**CONDITIONS OF ADMISSION.**—Admission to the College is conditional on passing the entrance examination and furnishing evidence of good health and character. Only resident students, who are prepared to stay the whole session and to take the full curriculum, are admitted. They must not be less than 17 nor more than 30 years of age on 1st September, 1909.

The entrance examination will be held in the first week in September, 1909, at four centres situated one in each province. Each applicant for admission will be notified in due course as to the centre at which he will be required to present himself. No expenses will be allowed in respect of attendance.

The subjects included in the examination will be as follows:—

- (1.) *English*, including dictation and composition.
- (2.) *Arithmetic*, including calculations requiring a thorough knowledge of weights and measures, decimal and vulgar fractions, percentages, and interest.
- (3.) *Mathematics*.—The elements of mensuration and algebra to simple equations.
- (4.) *Agriculture*.—The questions on this subject are framed with a view to testing knowledge acquired by practical experience of farm work. No text-book is prescribed or recommended. The examination may be oral as well as written.

**FEES.**—The fees for tuition, board, residence, laundry, and ordinary medical attendance during the entire session are:—

For students whose parents or guardians derive their means of living mainly from farming in Ireland, . . . . .	£15
For students other than the foregoing, . . . . .	£50

The fees are payable to the Principal in two instalments, viz., one of £10 (or £30) on entrance and the balance on 1st February. In addition to the instalment of the fee payable on entrance, each student must deposit with the Principal a sum of £3 to cover the cost of repairs to clothing, and of books and stationery. The unexpended balance, if any, of this deposit will be returned at the close of the Session.

#### OUTFIT.

Students are required to provide themselves with a proper outfit, particulars of which will be supplied to candidates successful at the entrance examination.

## APPLICATION FOR ADMISSION.

Application must be made on the prescribed form, to be obtained from :—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET,  
DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's Offices. They should be forwarded not later than the 15th August, 1909.

Form A. 168 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

## INSTRUCTION IN FRUIT-GROWING AND GENERAL GARDENING.

## HORTICULTURAL SCHOOL.

ALBERT AGRICULTURAL COLLEGE, GLASNEVIN, DUBLIN.

The course provided at this School is suited for men who have already had experience in fruit-growing and general gardening, such as can be obtained by working for four or five years under a fully qualified gardener. In addition to the practical work in the gardens, class-room instruction is given to the pupils to enable them to understand the scientific principles underlying horticulture.

Applicants for admission to the 1909-10 season must be at least twenty years of age on the 1st October, 1908, in good health and of strong constitution, and should have received a fair general education.

Pupils will be admitted on probation as the result of an examination which will be held at the Albert Agricultural College on the 27th August, 1909. The subjects included in the examination will be :—

- (1). English—to be tested by dictation and a short letter.
- (2). Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures; and percentages.
- (3). Practical Fruit-growing and Gardening.

A high standard will not be expected in English or Arithmetic. The examination in practical fruit-growing and gardening will cover the whole range of these subjects.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Successful candidates will be required to enter on their duties on the 15th October, 1909.

The season will close on the 30th September, 1910. Pupils may be retained at the School beyond that date, if, in the opinion of the Department, they would profit by an extension of the course.

Pupils will receive an allowance of 18s. per week during their first season and of 20s. per week during their second season.

When in receipt of these allowances they will be required to find their own board and lodging. In the event of lodging accommodation being provided for them at the College the allowances will be modified.

Pupils of the Horticultural School are subject to the conditions under which the gardeners at the College are employed.

The Department do not undertake to employ or to procure employment for the pupils at the close of the course, but the names of those who qualify will be sent to County Committees of Agriculture with an intimation that they are eligible for appointment by such Committees, to instructorships under the Department's scheme of Instruction in Horticulture and Bee-Keeping.

Several men who have already passed through the School are now employed by County Committees of Agriculture.

Application to attend the examination must be made on the prescribed form, to be obtained from :—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRISON STREET, DUBLIN.

Last date for making application—13th August, 1909.

Form A. 176 (a.)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

#### FARM APPRENTICESHIPS.

AGRICULTURAL STATION, ATHENRY, COUNTY GALWAY.

Young men who intend to become farmers are admitted to the Station for one year, as apprentices, for a course of practical training in several branches of farming.

Apprentices are admitted without payment of any fee. They are required to take part in all the operations of the fields and of the farmyard. They must perform diligently all work assigned to them by the Farm Manager or his foreman. In winter, class-room instruction is provided in the evenings. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the date of making application, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or bona fide occupation on a farm. Preference will be given to applicants from the province of Connaught. It will also be a recommendation if the applicant has attended a course of instruction held under the Department's Scheme of Winter Agricultural Classes, or if he produces a certificate from an Itinerant Instructor in Agriculture that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

Applications for apprenticeships may be made at any period of the year. Apprentices will be admitted in the order of the receipt of their applications in the Department's Office. The Department do not guarantee admission to any applicant. An apprentice will not be retained at the Station if he is found unable to perform a fair day's work or to be otherwise unsuitable.

On completion of twelve months at the Station, apprentices whose work has been done with care and diligence and to the satisfaction of the Farm Manager will receive small payments proportioned to the value of their work. In no case will such payment exceed £10.

#### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to applicants on being notified of their admission.

A sum of £1 must be deposited with the Superintendent on entrance to cover the cost of repairs to clothes, the purchase of books, stationery, etc. The unexpended balance, if any, of this deposit will be refunded on the termination of the apprenticeship.

## APPLICATIONS FOR ADMISSION.

Applications for admission must be made on the prescribed form to be obtained from:—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION STREET, DUBLIN.

FORM A. 176 (S.)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

## AGRICULTURAL EDUCATION FOR YOUNG MEN.

SESSION 1909-10.

## FARM APPRENTICESHIPS.

## AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1909, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or *bona fide* occupation on a farm. Preference will be given to applicants from the province of Ulster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in Ballyhaise House attached to the Station, where they are in the charge of a house master and matron. They must take part, as required, in all the work of the farm.

The Session will commence on the 6th October, 1909, and close on the 2nd September, 1910. It will be divided into two terms, viz., the Winter Term, from the opening of the Session to the 23rd March, 1910; and the Summer Term, from 6th April, 1910, to the close of the Session. Apprentices who are required at home for farm work during the spring and summer may leave the Station at the end of the Winter Term.

The course of training will include:—(1) class-room instruction in agricultural subjects which have a direct bearing on farming in Ireland; (2) instruction in subjects of a general educational nature, such as English, Arithmetic, book-keeping, etc., which will be useful to the apprentices in their future career as farmers; (3) practical instruction in all the work of the fields and farmyard in connection with the various seasonable operations and with permanent improvements; (4) lessons in veterinary hygiene and woodwork.

The Winter Term will be occupied principally with class-room instruction in agriculture and general subjects. The following subjects will be included in the agricultural course:—

Soils, tillages, manures (natural and artificial), seeds, grasses, woods, treatment of pasture, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, elementary chain surveying, and elementary science, explanatory of the principles underlying ordinary farm practice.

The Summer Term will be given almost exclusively to practical training in the outdoor work of the farm.

Admission as an apprentice is conditional on passing the entrance examination, producing certificates of good health and character, and paying the required fee according to the scale indicated below.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

#### ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination:—

*Arithmetic*—Simple calculations requiring a knowledge of weights and measures.

*English*—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate will be admitted as an apprentice whose general education is too backward to admit of his taking advantage of the class-room instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

#### FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the fees are proportional to the aggregate tenement valuation of their holdings, as follows:

	Per Session.
Where the aggregate valuation does not exceed £20	£3
Exceeds £20 but does not exceed £40	£6
Exceeds £40 but does not exceed £100	£10
Exceeds £100	£15

2. For apprentices not included in the foregoing classes . . . £20

These fees are in respect of the Winter Term. No additional fees are required from apprentices who are retained for the Summer Term.

Apprentices will be notified of the fees payable by them. Fees must be paid to the Superintendent on entrance, and in addition a sum of £1 must be deposited at the same time to cover cost of repairs to clothes, the purchase of books, stationery, &c. The unexpended balance, if any, of this deposit will be refunded at the close of the Session.

#### FREE PLACES.

A small number of free places provided under the terms of the Anne Hall Bequest are available for applicants from the Counties of Fermanagh and Londonderry. Applications for these places must be addressed in the first instance to the Agricultural Superintendent, Royal Dublin Society, Leinster House, Dublin.

#### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

#### APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from:—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UTTER MERION STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's Office.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

AGRICULTURAL STATION, BALLYHAISE, CO. CAVAN.

Session 1909-10.

CREAMERY COURSE.

Provision has been made at the Agricultural Station, Ballyhaise, for a course of technical instruction for young men who intend to become Creamery Managers.

The course will commence on Wednesday, 6th October, 1909, and will terminate on Friday, 4th March, 1910. There will be an interval at Christmas, from 23rd December, 1909, to 2nd January, 1910, both days inclusive.

The following subjects will be included in the course: Physical Science in relation to Creamery work; Dairy Bacteriology; Dairy Technology; Dairy Engineering; Business Methods.

The course will be particularly suitable for those who have had experience of creamery work.

Students who intend to compete for Creamery Managers' certificates under the Department's scheme for improvement in the management of creameries will have special facilities for the study of these subjects prescribed for the examination for these certificates which is to be held in March, 1910.

At the close of the technical course at Ballyhaise Agricultural Station, a limited number of the best students will be afforded facilities for learning the practice of Creamery Management during the summer of 1910, in a selected creamery in Ireland. Such students will receive a maintenance allowance at the rate of ten shillings per week, in addition to free instruction, while in attendance at the creamery.

Applicants for admission to the course must be at least twenty years of age on the 1st October, 1909.

Admission is conditional on passing the entrance examination, producing certificates of good health and character, and paying the specified fee.

Students are required to take part, as directed by the Principal, in all branches of the outdoor work of the station which relate to dairying. They must conform strictly to the disciplinary rules in force at the Station.

ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination:—

*Arithmetic.*—Calculations requiring a knowledge of weights and measures, fractions and percentages.

*English.*—Dictation, Grammar and Composition.

No expenses will be allowed to candidates in connection with their attendance at this examination.

FEE.

The fee for tuition, board, residence, laundry and ordinary medical attendance during the course will be £10.

The fee must be paid to the Principal of the Station on entrance, and, in addition, a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery, etc. The unexpended balance, if any, of this deposit will be refunded at the close of the course.

OUTFIT.

Students will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.



## APPLICATIONS FOR ADMISSION.

Applications for admission must be made on the prescribed form to be obtained from

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION-STREET, DUBLIN.

Applications will be dealt with in the order of their receipt in the Department's Office. They should be forwarded as soon as possible after 1st July, and not later than 1st September, 1909.

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Form A. 176 (c).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

## AGRICULTURAL EDUCATION FOR YOUNG MEN.

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SESSION 1909-10.

## FARM APPRENTICESHIPS.

## AGRICULTURAL STATION, CLONAKILTY, COUNTY CORK.

Young men who intend to follow the farming profession and who desire to acquire a practical knowledge of its several branches are admitted to the Station as apprentices.

The farm is managed by an experienced agriculturist under whose direction the apprentices are required to take part in all the work of the fields and of the farmyard, whether in connection with seasonable operations or permanent improvements. In the class-room attention is given, in the evenings and at other times when outdoor work is not pressing, to English, Arithmetic (including Surveying), Book-keeping and Technical Agriculture. This instruction is not intended as a preparation for any examination. It is of such a character as to continue the general education of the apprentices, and be useful to them in their future career as farmers.

Applicants for apprenticeships must be not less than seventeen years of age on the 1st October, 1909, and each must give an undertaking that it is his intention to become a farmer in Ireland. He must also provide, in his application form, evidence of a sure prospect of obtaining a farm of his own, or head *à* la occupation on a farm. Preference will be given to applicants from the province of Munster, especially to those who have attended a course of instruction under the Department's Scheme of Winter Agricultural Classes. It will also be a recommendation if the applicant produces a certificate from the Itinerant Instructor in Agriculture for the County in which he resides that he has taken advantage of the Instructor's lectures and demonstrations and has shown a desire to improve his knowledge of tillage farming.

The apprentices are required to reside in the buildings attached to the station where they are in the charge of a house master and matron.

The Session will commence on the 6th October, 1909, and will terminate on the 2nd September, 1910.

Admission as an apprentice is conditional on passing the entrance examination, producing certificates of good health and character and paying the required fee according to the scale indicated overleaf.

Applicants who have been pupils at Winter Agricultural Classes will be exempted from the entrance examination provided their attendance and progress at the Agricultural Classes have been satisfactory.

## ENTRANCE EXAMINATION.

Particulars as to the date of this examination and the place at which it will be held will be notified to each applicant.

The following subjects are included in the examination :—

*Arithmetic*.—Simple calculations requiring a knowledge of weights and measures.

*English*.—Dictation, Grammar and Composition.

The examination will be of such a nature as should present little difficulty to a young man who has passed the fifth standard at a National school.

No candidate will be admitted whose general education is insufficient to enable him to profit by the class-room instruction, or who is, in the opinion of the Department, unsuitable in any other respect for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

#### FEES.

1. For apprentices whose parents or guardians derive their means of living mainly from farming in Ireland the fees are proportional to the aggregate tenement valuation of their holdings, as follows :—

	Per Session.
Where the aggregate valuation does not exceed £20, . . . . .	£3
Exceeds £20 but does not exceed £40, . . . . .	£6
Exceeds £40 but does not exceed £100, . . . . .	£10
Exceeds £100, . . . . .	£15

2. For apprentices not included in the foregoing classes, . . . . . £20

Apprentices will be notified of the fees payable by them. Fees must be paid to the Superintendent on entrance, and in addition a sum of £1 must be deposited at the same time to cover the cost of repairs to clothes, the purchase of books, stationery etc. The unexpended balance, if any, of this deposit will be refunded at the close of the session.

#### OUTFIT.

Apprentices will be required to provide themselves with a proper outfit, particulars of which will be supplied to the successful candidates.

#### APPLICATIONS FOR ADMISSION.

Application for admission must be made on the prescribed form to be obtained from—

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION-STREET, DUBLIN.

The applications will be dealt with in the order of their receipt in the Department's Office. They should be forwarded not later than 15th August, 1909.

#### AGRICULTURAL COLLEGE, MOUNT BELLEW.

##### Session 1909-10.

The College stands in a picturesque and healthy position, in the midst of the charming wooded scenery of the Mount Bellew Demesne. It is under the management of the Franciscan Brothers.

New laboratories, with all modern requirements, and a model farmyard have been lately built and equipped by the Department of Agriculture.

The farms, gardens, and laboratories afford ample facilities for a thorough course in Technical Agriculture, and also in those subjects set out below. Students are required to take part in all farm operations in the field, farmyard and dairy.

The Session for the year 1909-10 will commence on 1st September, 1909, and end on 25th June, 1910. Applicants must be sixteen years of age or over.

The course of instruction at the College includes the following subjects:—

- 1.—Practical Farming. Every student is encouraged to take part in all farm operations, and is taught to follow the working of the system of farming adopted, with interest and profit. Each student keeps for himself a set of farm books and notes all outlays and incomes for farm operations, live stock and dairy, etc., as if the farm were his own. The final balancing at end of year tells him exactly how the farm paid, what paid best and where losses were sustained, etc.
- 2.—A course of Physics, Chemistry, and Biology explanatory of the natural processes which increase or diminish the returns from farm operations.
- 3.—Farm Calculations, Surveying of Land. Values of Manures and Feeding Stuffs.
- 4.—Study of Seeds, Grasses, Weeds and Pastures.
- 5.—Use of Natural and Artificial Manures.
- 6.—Management of Live Stock. Winter Dairying.
- 7.—Veterinary Hygiene.
- 8.—Poultry Keeping.
- 9.—Fruit Growing.
- 10.—Bee-Keeping.
- 11.—Woodwork.
- 12.—Book-keeping.

#### TERMS.

Fifty Scholarships of £10 each will be awarded this year on the result of a qualifying Entrance Examination in the following subjects:—(a) English Composition (short essay or a letter); (b) Arithmetic, tested by simple questions; (c) some knowledge of practical agriculture. N.B.—The object of this examination is mainly to find out if candidates for scholarships have sufficient ability to profit by the programme of work outlined in syllabus.

Each Scholarship Student will be required to give an undertaking that it is his intention to become a farmer in Ireland, or that he has a good prospect of obtaining occupation on a farm in Ireland.

The Pension for those awarded Scholarships will be £15, payable in advance.

For all others the pension will be £25 payable in two instalments, £15 on day of entrance, and £10 on the first of February. The fee for non-resident students shall be £3 per year, payable in advance.

Students are under the supervision of the Brothers at all times—on the farm, in the laboratories, dormitories, and at recreation.

Form A. 168 (s.).  
1910.

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

##### POULTRY FATTENING.

##### APPRENTICESHIPS.

The Department have made arrangements for the training, as apprentices to the poultry-fattening industry, of a limited number of young men who desire to become qualified for the position of poultry fatteners at fattening stations in Ireland. Apprenticeship may extend over a period of twelve months or longer according to the efficiency of the apprentices.

The apprentices will be instructed in the preparation of suitable foods, the selection and buying, fattening, cramming, killing, plucking and preparation of poultry for market, and in the rearing and management of poultry if found necessary. They will be required to devote their whole time to such work.

Applicants for apprenticeships must be at least twenty years of age, unmarried, in good health and of strong constitution. Preference will be given to those who have had experience in poultry-keeping.

The apprenticeships will be awarded on the result of an examination which will be held in Dublin in January, 1910. The examination will include written tests in English and Arithmetic. A high standard will not be expected in these subjects. Each candidate will also be examined orally as to his general suitability for an apprenticeship.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Successful candidates will be called up for training as vacancies for them occur. They will receive wages at the rate of 16s. per week from the date of their commencing work and will be required to find their own board and lodging. The engagement between apprentices and the Department may be determined at any time by one week's notice on either side.

The Department do not undertake to employ or to procure employment for apprentices on the conclusion of their training.

Applications for apprenticeships must be made on forms provided for the purpose, which can be obtained from

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

Latest date for receiving applications, 18th January, 1910.

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Form A. 122 (a.).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

THE MUNSTER INSTITUTE, CORK.

The classes at the Institute are open to female students only.

The course of training includes:—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, calves and pigs; in the keeping of small gardens, and in the manipulation and caring of bees.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and pecking of eggs; hatching and rearing of chickens; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needlework, laundry work, and home nursing.

The fee for tuition, board and lodging during one session is £3 3s. and is payable to the Superintendent of the Institute on entrance.

Four sessions, each of about eleven weeks' duration, and commencing, respectively, in January, March, July and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the Institute. They are required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

Students are eligible for admission to a second consecutive session, provided they attain the required standard at the examination at the conclusion of their first session.

Students who have attended during two sessions, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry-keeping under a County Committee of Agriculture and Technical

Instruction or of Teacher in a School of Rural Domestic Economy for girls, are admitted to a third session on attaining the required standard at the second terminal examination and satisfying the Department's examiner as to their ability to impart instruction. If their progress during the third session is satisfactory they are re-admitted to enable them to complete their training.

Attendance at the Institute during five or six sessions is necessary to qualify students for admission to the examinations for Instructorships and Teacherhips.

The Department do not undertake to employ or to find employment for students on completion of their training at the Institute.

A limited number of free places and half-free places are awarded to the students who display special merit at the terminal examination of the first session to enable them to avail of a second session entirely or partially free of expense. A few similar places are also offered to students who have attended two sessions at the Institute.

The students are at all times under the supervision of an experienced matron.

Applications for admission must be made on the prescribed form which can be obtained from—

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

FORM A 255 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

THE ULSTER DAIRY SCHOOL, COOKSTOWN, CO. TYRONE.

The School is situated on an extensive tillage and dairy farm about three miles from Cookstown Railway Station. It is provided with the most modern equipment for the teaching of the several subjects included in the programme.

The classes are open to female students only.

The course of training includes:—

- I. The practice of dairy-work. The treatment of milk and the making of butter on a large and on a small scale with the most modern machinery and implements, as well as with the appliances generally used in farm dairies.
- II. Instruction in the feeding and management of cows, and in farmyard lore.
- III. Instruction in poultry-keeping. Breeds; their suitability for different purposes and different localities; housing, feeding and management; grading and packing of eggs; hatching and rearing of chickens by natural and by artificial methods; fattening, killing, plucking, trussing and preparation for market.
- IV. Instruction in domestic work, embracing plain cookery, plain needle-work and laundry work.

The fee for tuition, board and lodging during one session is £3 3s., and is payable to the Superintendent of the School on entrance.

Four sessions, each of about eleven weeks' duration, and commencing, respectively, in January, March, July, and October, are held in each year.

Intending students must be at least seventeen years of age on the date of their admission to the School. They are required to produce certificates of good health and character and to pass an examination in the elements of English and Arithmetic. This examination is held at the School at the opening of each session.

Students are eligible for admission to a second consecutive session, provided they attain the required standard at the examination at the conclusion of their first session.

Students who have attended during two sessions, and who are desirous of qualifying for the position of Itinerant Instructor in butter-making or poultry-keeping under a County Committee of Agriculture or of Teacher in a School of Rural Domestic Economy for girls, may be admitted to a third session provided they attain the required standard at the second terminal examination and satisfy the Department's examiner as to their ability to impart instruction. If their progress during the third session is satisfactory they may be re-admitted to a fourth, fifth, or even a sixth session at the option of the Department to enable them to complete their training.

The Department do not undertake to employ or to find employment for students on completion of their training at the School.

The students are at all times under the supervision of a responsible matron.

Applications for admission must be made on the prescribed form, which can be obtained from—

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION STREET, DUBLIN.

Form A. 135 (c).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

SCHOOL OF RURAL DOMESTIC ECONOMY, LOUGHGLYNN,  
CO. ROSCOMMON.

This school has been established in order to provide the women and girls of the neighbourhood with such practical training as will enable them to increase the comfort of their homes and improve generally the conditions under which they live. The particular object of the Department in promoting this type of instruction in rural districts in Ireland is to inculcate respect and affection for the home and the countryside, and thereby counteract the tendency to despise farm work and abandon rural life. The training aims at making efficient housewives. It does not aim at the preparation of girls for domestic service or for the factory or the shop.

The course of instruction comprises:—

*Dairying*—Including the making of cheese as well as butter; and the caring and feeding of cows and calves.

*Poultry-keeping*—The rearing and management of hens, ducks, turkeys and geese.

*Pig-rearing*—The feeding and general management of pigs.

*Gardening*—The cultivation of such vegetables, fruits, and flowers as may be grown in the cottage garden.

*Bee-keeping*.

*Sewing, Knitting, and Mending*—Including the making and repairing of garments of every kind worn in the district.

*Washing and Ironing*.

*Cooking*—The preparation, with inexpensive and simple utensils, of those dishes for which the materials are furnished by the products of the farm and the garden. Open hearths are used.

*The Cleaning and Decoration of the home*.

*Home Industries* which can be carried on in time not required for the farm or the household, such as lace-making, embroidery, carpet weaving, the making of artificial flowers, etc.

The School is open to all who wish to enter, without restriction as to religious denomination. No fees are payable; the only conditions which the pupils must fulfil are that they should be more than fourteen years of age and reside sufficiently near the School to permit of their returning daily to their homes.

In order to give the lessons direct, practical application to the home life of the people, the pupils are required to bring with them to the school, so far as may be practicable, the materials needed for their work—the cream or milk for dairy practice, the poultry to be killed or dressed; the materials for the dishes to be cooked; the cloth for new garments; the clothing to be repaired, washed or ironed. The pupils take home with them in the evening the products of their day's labour, which serve as object-lessons to those who cannot be present at the classes.

Housewives, and others in the neighbourhood who are not in a position to attend the classes daily, are at liberty to avail themselves of the instruction in any subject, and to come to the school for advice whenever they desire it in connection with their home work; and the teachers are prepared to visit the houses of persons who desire their guidance in the difficulties of household management.

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FORM A. 135 (a)

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND  
SCHOOL OF RURAL DOMESTIC ECONOMY.

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ST. MARY'S CONVENT OF MERCY, PORTUMNA, CO. GALWAY.

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The school is open to female pupils over sixteen years of age without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work, and Needlework.

The school year extends from the beginning of October to the end of August, and is divided into two sessions, which begin, respectively, in October and in March.

Intending pupils are required to produce certificates of good health and character. They will not be admitted unless they have received sufficient general education to enable them to follow the course.

DAY PUPILS.

Applications for the admission of day pupils should be made to the Manager at the School. No fees are payable by day pupils.

RESIDENT PUPILS.

Fifteen places for resident pupils are provided by the Department.

The fee for tuition, board and lodging during one session, covering a period of about twenty-four weeks, is £3 3s., and is payable to the Manager on entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session on payment of the above-mentioned fee.

Application for admission must be made on the prescribed form, which can be obtained from

THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION-STREET, DUBLIN.

NOTE.—Somewhat similar prospectuses were issued in respect of the schools at Claremorris, Clifden, Salford, and Westport.

FORM A. 135 (b).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.SCHOOL OF RURAL DOMESTIC ECONOMY,  
CONVENT OF ST. LOUIS, RAMSGRANGE, CO. WEXFORD.

The school is open to female students over sixteen years of age, without restriction as to religious denomination.

The course of training is intended to qualify the pupils to perform efficiently the work of rural life, and includes—Dairying, Poultry-keeping, Horticulture, Household Management, Cookery, Laundry-work and Needle-work. Instruction in English, Arithmetic, Book-keeping, Elementary Science, and Chemistry is also provided.

The school year extends from the beginning of October to the end of August, and is divided into two sessions, which begin, respectively, in October and in March.

Thirty places for resident students are provided by the Department. The fee for tuition, board and lodging during one session, payable by the holders of these places, is £3, and applicants are required, before admission to the school, to produce certificates of good health and character, and to pass an examination in the elements of English and Arithmetic. The fee payable by resident pupils other than holders of these places is £10 per session. Day pupils are admitted at a fee of £1 per session. Fees must be paid to the Manager on entrance.

Pupils whose conduct and progress during their first session are satisfactory are eligible for admission to a second consecutive session.

Application for admission as a resident student must be made on the prescribed form, which can be obtained from

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

Applications for the admission of day pupils should be made to the Manager at the school.

FORM A. 135 (f).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.SCHOOL OF RURAL DOMESTIC ECONOMY,  
KILLESHANDRA VILLAGE INSTITUTE, CO. CAVAN.

The school is open to female pupils over fifteen years of age, without restriction as to religious denomination.

The course of instruction is intended to qualify the pupils to perform efficiently the work of rural life. It includes Household Management, Cookery, Laundry-work and Needle-work. Attention is also given to Dairy Work and Poultry-keeping.

Intending pupils must undertake to attend regularly and punctually. They may be required to produce certificates of good health and character and to show that they have received sufficient general education to enable them to follow the course.

Arrangements have been made which admit of four pupils being boarded and lodged at the school. The girls to whom these residential places will be awarded will be selected by the Manager subject to the approval of the Department, and they will be allowed to reside at the school for such periods as the Department may decide.



The annual session at the school extends from the beginning of October to the end of July, and is divided into three terms, which commence, respectively, in October, January, and April.

The classes are held each day (Sundays excepted) from 11 a.m. to 5 p.m.

#### Fees.

The fees are proportioned to the valuation of the holdings of the pupils' parents or guardians as follows:—

##### A. FOR DAY PUPILS.

Where the valuation does not exceed £20 . . . . .	2s. 6d. per term.
Where the valuation exceeds £20 but does not exceed £40 . . . . .	3s. 6d. " "
Where the valuation exceeds £40 . . . . .	5s. 0d. " "

##### B. FOR RESIDENT PUPILS.

Where the valuation does not exceed £20 . . . . .	£1 0s. 0d. " "
Where the valuation exceeds £20 but does not exceed £40 . . . . .	£1 10s. 0d. " "
Where the valuation exceeds £40 . . . . .	£2 0s. 0d. " "

Special classes in simple Cooking and Household Work are held on Saturdays for the instruction of school girls (above fifth standard).

In the case of persons, such as mothers of families, who are too much occupied with their household work to attend regularly throughout the term, arrangements will be made to admit of their attending any one course or separate lessons.

Applications for admission should be made to

THE DOMESTIC ECONOMY INSTRUCTRESS,  
THE INSTITUTE,  
KILLESHANDRA.

Form A. 181 (a).  
1909.

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,

##### FORESTRY INSTRUCTION.

A limited number of apprenticeships in Forestry will be awarded on the result of an examination which will be held at the Royal College of Science, Dublin, on the 7th September, 1909. The subjects included in this examination will be:—

English—to be tested by dictation and a short letter.

Arithmetic—the first four rules, simple and compound; a knowledge of weights and measures, proportion, and percentages.

A high standard will not be expected.

No expenses will be allowed to candidates in connection with their attendance at this examination.

Applicants for apprenticeships must be at least eighteen years of age on the 1st October, 1909, in good health, and of strong constitution, and should have received a fair general education. Preference will be given to those applicants who have had experience in working in woods.

The selected applicants will be required to work under the directions of a skilled foreman, for at least one year, in one of the woods belonging to the Department. During this period apprentices will be given facilities for improving their general education. Apprentices who acquit themselves in such a manner as to lead the Department to believe that they are likely to make suitable foresters may, at the end of this period, be selected to

attend a further course of instruction at Avondale Forestry Station, Rathdrum. The duration of the course at Avondale may extend from one to two years, and in addition to class-room instruction apprentices will be required to take part in the work of the woods attached to the station or in such of the woods belonging to the Department as may be decided on from time to time.

Successful candidates will be required to enter on their duties on the 4th October, 1909.

Each apprentice will receive during the first year an allowance at the rate of 14s. per week, with furnished lodging. When in receipt of this allowance the apprentices will be required to find their own board. Such apprentices as are selected to attend at Avondale station for a further period of training will be provided with free board, lodging and education and receive allowances at the rate of 5s. per week.

Apprentices must undertake to conform with the rules and regulations made from time to time in connection with their work in the Department's woods and at the Forestry station.

The engagement between apprentices and the Department may be determined at any time by one week's notice on either side.

The Department do not undertake to employ or to procure employment for apprentices on completion of their training.

Applications for apprenticeships must be made on the prescribed forms to be obtained from .

THE DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION,  
UPPER MERION-STREET,  
DUBLIN.

Last date for making application—24th August, 1909.

FORM A. 169 (a).

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

#### FORESTRY.

#### NOTICE TO OWNERS OF WOODS AND PERSONS PROPOSING TO FORM PLANTATIONS.

The Department are prepared to afford expert assistance to landowners and others who may require advice on such matters as the selection of sites for plantations, suitability of soil, choice of trees, treatment and valuation of existing woods, draining and fencing of woodlands, valuation of timber, growing of oysters, etc.

The Department's Forestry Expert will, so far as time will permit, visit existing woods or lands which it is proposed to plant. In such cases a fee of £2, to cover part of the Expert's expenses, will be charged when the visit does not entail an absence from headquarters of more than three days. For visits extending over a longer period a special fee may be arranged, but the Department do not guarantee that more than one complete day will be allowed for each visit. If a visit from the Expert is not required, advice will be given by letter free of charge.

The Department are also prepared to facilitate the planting of small areas by placing at the disposal of persons who propose to form plantations the services of any working foresters who can be spared from the Department's woods for a few weeks in the planting season. The wages and travelling expenses of these foresters must be paid by the persons by whom they are employed.

The undermentioned leaflets on forestry subjects have been issued by the Department, and will be supplied to applicants free of charge:—

- |         |            |   |
|---------|------------|---|
| No. 65. | —Forestry. | —The Planting of Waste Lands.   |
| No. 66. | "          | The Proper Method of Planting Forest Trees.                                 |
| No. 67. | "          | Trees for Poles and Timber.   |
| No. 68. | "          | Trees for Shelter and Ornament.   |
| No. 70. | "          | Planting, Management, and Preservation of Shelter Belt and Hedgerow Timber. |
| No. 71. | "          | The Management of Plantations.  |
| No. 72. | "          | Felling and Selling Timber.   |
| No. 73. | "          | The Planting and Management of Hedges.                                      |
| No. 83. | "          | Cultivation of Osiers.  |
| No. 84. | "          | Cost of Forest Planting.  |

Applications for visits from the Expert or for the services of skilled planters should be made on the forms provided for the purpose, and will be attended to as far as possible in order of their receipt in the Department's offices.

Letters, which need not be stamped, should be addressed to

THE SECRETARY,  
DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

[COPY]

DEPARTMENT OF AGRICULTURE  
AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET,  
Dublin, 30th April, 1910.

No. 8058.10.

SIR,

I have to transmit, for the information of your Council, a copy of the Report of the Committee on Irish Forestry, appointed by the Department in 1907, to inquire into and report upon certain matters relating to the improvement of forestry in Ireland, and to direct the special attention of the Council to the portions of the report which refer to the action that may be taken by County Councils in promoting afforestation.

With a view to the preservation and extension of woodland areas, it has now been arranged with the Estates Commissioners that, in cases where woods or lands adapted to forestry are included in estates which are being dealt with by the Commissioners, the Department shall be notified of the fact so that they may have an opportunity of considering whether such woods and lands are suitable for acquisition by a public body. The Department propose to purchase, so far as the funds at their disposal will permit, those forest areas which are of sufficient extent for economic working by a central authority. The smaller areas cannot, however, be dealt with in this manner. Many small woods and plantations can be permanently maintained only by local authorities, in accordance with schemes on such lines as are confined in the report of the Forestry Committee. The Department, therefore, desire to learn to what extent County Councils are prepared to institute local forestry schemes applicable to any property which might appear, on inspection by the Department's Forestry Expert, to be suitable for acquisition by a County Council.

Forestry is one of the purposes to which rates raised by County Councils under the Agriculture and Technical Instruction (Ireland) Act may be applied. In addition to the rate, not exceeding one penny in the pound, specially provided for in that Act, a Council may strike an additional rate, not exceeding one penny in the pound, under the Technical Instruction Acts of 1889 and 1891, and, in accordance with the provisions of Section 19 (2) of

the 1899 Act, apply the proceeds to any of the purposes contemplated in the last mentioned Act. The application to forestry work of the funds produced by these rates must be in accordance with a scheme previously approved by the Department.

The Department are advised that, under the Act of 1899, a County Council may acquire and hold land for forestry purposes, while Section 18 (1) of the Irish Land Act of 1909 enables a Council to purchase portions of estates for the purpose of the planting of trees or the preservation of woods or plantations, to act as trustees for these purposes, and to obtain advances for the purpose. In cases of purchase by a Council under the last named Act the amounts required for the payment of the instalments of the purchase annuity can be provided out of the rates. The schemes for the use of lands so purchased are subject to the approval of the Department.

Besides the forest lands which may be brought to the Department's notice by the Estate's Commissioners, other such lands will, no doubt, be offered direct to the Department and to County Councils. If a County Council is willing to undertake forestry work, the Department will have such lands as may appear to be suitable for its purpose inspected free of charge and reports thereon furnished to the Council. The Department will also be prepared, so far as the staff at their disposal will admit, to afford Councils who adopt forestry schemes any expert advice which may be necessary.

When a County Council adopts a forestry scheme approved by the Department, it will generally be found most convenient under existing conditions for the Council, as soon as the lands have been acquired by them, to delegate to the County Committee of Agriculture the administration of the details of the scheme. The County Committee, however, not being a body corporate, cannot acquire or hold land.

At present the rates mentioned above are the only source from which County Councils can draw funds for forestry operations. The Department are, however, of opinion that, pending further financial provision for forestry in Ireland, the majority of County Councils would be in a position to make a useful beginning with the work if they assigned for the purpose the produce of a special rate of one halfpenny in the pound for one year. The annual charge in respect of the purchase of woodlands acquired under the Land Acts of 1903 and 1909 would be small, and, in the case of many woods suitable for preservation by County Councils, little expenditure beyond the cost of caretaking would be necessary for some years to come. It is probable that in many instances Councils might acquire woods containing a quantity of mature timber suitable for immediate reclamation, the proceeds of the sale of which would cover a considerable portion of the expenses of replanting.

As the existence of grazing or other rights over lands suitable for forestry might in many instances prevent their being acquired for planting by County Councils or other trustees, provision has been made in Section 19 (1) of the recent Land Act for the release from such rights of forest lands purchased or proposed to be purchased by trustees.

The Land Act of 1909 also contains an important provision by which purchasers of holdings become liable to a penalty if they fell, without the consent of the Department, any tree necessary for the shelter or ornament of their holdings. The unnecessary felling of trees, a practice frequently destructive of the beauty of the landscape, is a matter of general public concern, and County Councils can greatly aid in checking the abuse by causing their officers to report to the Department any instances of it which come to their notice.

The Department feel that County Councils do not require to be convinced of the necessity for taking promptly such measures as are within their power for the prevention of further uneconomic destruction of woods, and for that extension of wooded areas which is so desirable in every county.

I have to add that the Department will be glad if your Council will, at their next meeting, give special attention to the subject matter of this letter, and communicate the results of their consideration to these offices

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in due course. In approved cases the Department will be prepared to conduct, on behalf of the County Council, the purchase negotiations with the Estates Commissioners.

I am, Sir,

Your obedient Servant,

(Signed) T. P. GILL,  
Secretary.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

AGRICULTURAL SCHEMES, 1909-10.

15645.09.

Sir,

In forwarding for the information of your Committee the accompanying copies of the agricultural schemes for 1909-10, the Department desire to direct special attention to the alterations which have been made in the schemes, as well as to some of the more important regulations.

Scheme No. 1.—*Horses.*

Thoroughbred stallions are defined in clause 10 as those calculated to produce weight-carrying hunters and high-class harness horses. The last date for receiving applications for the registration of stallions, *without fee*, is the 30th September, 1909. Applications in respect of stallions already at stud in Ireland will not be accepted after 30th November, 1909 (clause 13).

Scheme No. 2.—*Cattle.*

Under clause 13 the County Committee at their discretion may fix the value of a premium for a high-class pure-bred bull at any figure they wish provided it is not less than £10 nor more than £15. The service season for a premium bull will henceforth commence on the date on which the owner notifies the Secretary of the County Committee that he has procured a bull (clause 18).

Scheme No. 3.—*Swine.*

The value of the premium for hogs of all recognised breeds is now fixed at a uniform figure, viz. :—£5 for the first year and £3 for the second year (clauses 10 and 13).

Scheme No. 4.—*Leases for Stallions.*—No change.

Scheme No. 5.—*Leases for Bulls.*—No change.

Scheme No. 6.—*Subsidies to Agricultural, etc., Societies.*

This scheme has been revised so as to ensure that all societies receiving subsidies shall comply with the prescribed regulations. Applications for subsidies must be made to the County Committee by the Show Societies or other bodies concerned, on the prescribed form not later than 1st February, 1910, and it will devolve on each County Committee to consider all such applications not later than 1st March, 1910 (clause 2).

Owing to the laxity with which this scheme has been administered in certain counties in the past, the Department desire to call attention to clause 11, and to give due notice that they will in future strictly enforce this clause.

As portion of the funds available for the scheme may be expended on skilled labour competitions, the Department suggest that, in addition to encouraging ploughing matches, the County Committees should endeavour to organise other competitions, for example, in digging, hedge-cutting, ditching, thatching, turnip thinning, milking, etc., implement trials suitable for different seasons, etc.

*Scheme No. 7.—Prizes for Cottages and Small Farms.*

In regard to the section for cottages with gardens, County Committees in awarding prizes may choose any one of the following methods of payment:—(a) wholly in cash, (b) wholly in fruit trees and seeds, (c) partly in cash and partly in fruit trees and seeds (clause 1).

The definition of the term "bona-fide cottager" will be a matter for the County Committee to settle. National school teachers are ineligible to compete under the scheme (clause 2).

*Scheme No. 8.—Instruction in Agriculture.*

Instructors who use motor cycles may be given an allowance of 8d. per mile.

*Scheme No. 10.—Winter Agricultural Classes.*

It will be observed (clauses 3 and 4) that the minimum period during which classes may be held has been fixed at sixteen weeks, that instruction shall be given for at least four hours each day, and that in exceptional circumstances young men not less than fifteen years of age may be admitted.

*Scheme No. 11.—Poultry Keeping.*

The qualifying number of sittings of eggs to be distributed from each hen and duck station has been increased from seventy to eighty (clause 10). Houdan fowl will be approved for 1909-10 only at those stations at which the breed was kept last year. Houdans will not, however, be recognised in any future year.

*Scheme No. 12.—Tutorial and Practical Classes in Poultry Keeping.*

The methods of organising and conducting the classes are now very fully set forth in this scheme.

*Scheme No. 13.—Butter-making.*

This scheme will be continued on the lines adopted in previous years.

*Scheme No. 14.—Horticulture and Basketry.*

The instructors under this scheme who use motor cycles may receive an allowance not exceeding 8d. per mile.

County Committees who decide to purchase trees, etc., in bulk for resale at cost price, including carriage, to residents in the county should take steps early in the autumn to obtain tenders from nurserymen. The tenders must be submitted to the Department not later than 1st January, 1910 (clause 9).

Demonstration plots under the scheme may not be established in connection with National or other Primary Schools or Teachers' Residences (clause 11).

It will be observed that no provision has been made in this scheme for the cost of fencing of plots. Where such may be necessary, all expense of this nature must be defrayed by the person on whose land it is intended to establish the plot. The lists of trees, vegetables, etc., recommended for demonstration plots have been revised.

*Female Instructors or Teachers.*

The Department have found it desirable to make a rule that the appointment of a female instructor shall terminate, as a matter of course, on her marriage. A provision to that effect has been inserted in schemes Nos. 11 and 13, in connection with which female instructors are usually employed, but the rule will be applied to such who may be employed under any other agricultural scheme.

A supply of the schemes will be issued to you on receipt of your application, which should be made on the accompanying form. It is particularly requested that you will not ask for more copies than can be profitably used during the year.

I am, Sir,

Your obedient Servant,

T. P. GILL,

*Secretary.*

The Secretary of each

County Committee of Agriculture.

Scheme No. 1.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS  
OF HORSES.

1910.

GENERAL REGULATIONS.

1. The main objects of this scheme are to encourage the improvement of Horse Breeding in Ireland by inducing stallion owners to keep suitable and sound sires of a high degree of excellence, and by inducing farmers to retain their best young mares for breeding purposes. When arranging the details of this scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of horses in a county will depend on—(1) the amount provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (5) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, all details of schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that Committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department, but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely for nominations of mares.

9. In the event of there not being a sufficient number of registered stallions in any county for the purposes of this scheme, the Department may provide for such county, under certain conditions to be prescribed by them, by assisting approved applicants, whether individuals or associations, to buy suitable stallions under the Department's scheme of loans for the purchase of stallions.

#### REGISTRATION OF STALLIONS.

10. Thoroughbred stallions, calculated to produce weight-carrying hunters and high-class harness horses, may be registered for any county in Ireland.

Irish Draught and Half-bred stallions may be registered for any county in Ireland.

All Clydesdale and Shire stallions registered in 1909 may again be offered for registration under this scheme for the particular districts in which they were registered during that year, but no other stallions of these breeds will be accepted for registration in 1910 except for the Province of Ulster, the counties of Dublin and Louth, and the district comprised within a radius of ten miles of the city of Cork.

11. The Department will publish a Register of Thoroughbred, Irish Draught, Half-bred, Clydesdale, and Shire Sires approved for service under this scheme. Owners of suitable stallions are invited to apply to have their horses placed on the Register, subject to the provisions of this scheme. A stallion to be entitled to a subsidy in the form of nominations, or otherwise, must be registered or accepted for registration in the Department's Register of Stallions for the year 1910.

Copies of the Register, when published, may be had free of charge on application to the Department.

12. (1.) Owners offering their stallions under this scheme must, if required, submit them to inspection and veterinary examination by the Department. Notice of the arrangements as to place and method of inspection will be given.

(2.) Owners of stallions failing to present their animals for inspection on the dates and at the places selected will be liable to have their applications cancelled by the Department.

(3.) Thoroughbred stallions, to qualify for registration, must be entered in Weatherby's Stud Book, or, if Clydesdale or Shire, be entered in the stud book of the respective breed. If required the stallion owner or (if the stallion is being purchased with a view to registration in Ireland) the vendor must produce a certificate from the keeper of the stud book to the effect that the stallion offered for registration is entered in the stud book or will duly appear in the next volume.

(4.) No application will be considered in which every particular required in the form of application is not supplied.

(5.) No application will be considered in respect of a stallion foaled in 1908.

(6.) The owner of a stallion accepted under this scheme must agree not to permit that stallion to serve more than fifty nominated mares, which are entitled to its services. This regulation is subject, however, to the conditions stated in Clauses 21 (14), 22 (1), and 30.

(7.) Stallions approved under this scheme will be accepted for particular districts only, and shall not, without the written consent of the Department, be removed to other districts. If a stallion is removed without such consent to a district for which it was not accepted, the name of each



stallion shall be removed from the Register, and the owner shall forfeit all claim to any monies which may be payable to him under this scheme.

13. Forms of application for the purposes of this scheme may be had from the Department.

One of these forms, accurately filled up in every particular and signed by the owner or his agent, must be lodged in or sent by post so as to reach the offices of the Department not later than the 30th day of September, 1909.

An application received subsequent to that date, and before the 30th day of November, 1909, must be accompanied by a fee of £5.

Applications for registration in respect of stallions already at stud in Ireland will not be accepted after the 30th day of November, 1909.

14. (1.) Applications in respect of stallions imported into Ireland after the 30th day of September, 1909, will be considered without fee if received on any date up to the 28th February, 1910. Similar applications in regard to stallions in Ireland which have not previously been used for stud purposes will be considered up to 28th February, 1910, provided they are each accompanied by a fee of £5. The entry of such stallions in the published Register for 1910 cannot, however, be guaranteed, but the owners of such stallions will be accorded all the privileges enjoyed by the owners of stallions appearing in the printed Register.

(2.) A person in Ireland intending to import a stallion or to buy a stallion already located in Ireland is advised not to complete the purchase until he has received formal notice in writing from the Department that the stallion in question will be accepted under this scheme for a particular district. [See clause 18.]

(3.) The Department will, as far as practicable, supply the services of their Inspectors free of charge to persons in Ireland intending to purchase and import suitable stallions for districts in which there is not a sufficient number of approved stallions for the purposes of this scheme; the stallion, however, must have been seen and provisionally approved by the intending purchaser.

(4.) The vendor of a Pure-bred sire must, if required, submit a certificate from the Secretary of the stud book to the effect that the animal is entered in the stud book, or will duly appear in the next volume.

15. Stallions may be inspected for their general merit and fitness for the purposes of the scheme. Such inspection shall be carried out by one or more Inspectors appointed by the Department. If the stallion has been to stud, evidence of his fruitfulness, and, where practicable, of the character of his stock, must be produced, if required. Inspection for general fitness, when deemed necessary, shall, as far as possible, precede veterinary examination.

16. (1.) The veterinary examination shall be carried out by one or more qualified Veterinary Surgeons, appointed by the Department.

(2.) No stallion shall be rejected as unsound unless suffering from one of the following diseases:—Catarrh, Roaring, Whistling, Ringbone, Sidebone, Unsound Feet, Spavin, Curb.

17. The inspection for general merit and fitness and the veterinary examination of stallions may be dispensed with in cases where evidence of suitability and soundness have been sufficiently established to satisfy the Department.

The Department, however, shall have the right to inspect an accepted stallion at any time.

18. The Department cannot undertake to disclose their reasons for the non-acceptance of any animal, but with the exceptions hereinafter mentioned the owner of any stallion in Ireland not accepted may have his case reconsidered by one or more referees appointed by the Department. Every notice of appeal must be accompanied by a fee of £5, which will be returned in the event of the appeal being upheld. Notice of appeal must be given in writing within ten days from the date of the letter of rejection.

This privilege shall not extend to cases in which stallions have been rejected on appeal in a previous year or to cases in which stallions are offered under clause 14 (1 and 2).

19. The Department reserve to themselves the right, without assigning any reason, or without inspection or veterinary examination, to decline

to place or retain on the Register any stallion for the purpose of this scheme.

No right of appeal shall lie in the case of stallions rejected under this clause.

20. Owners of stallions making, or promising to make, any gift to the owner of a nominated mare of a portion of the service fee, allowing a nominated mare to be served by a stallion other than that originally selected by the owner of the mare, or detected in any other fraudulent practice in connection with this scheme shall have their horses struck off the Department's Register, and shall be debarred from obtaining any future benefit under the Department's schemes. They shall also forfeit any claim in respect of mares due to them under this scheme.

#### NOMINATIONS OF MARES.

21 (1.) Upon consecutive dates, and at places to be first approved by the Department, exhibitions of farmers' mares shall be held in each county for the purpose of issuing nominations.

(2.) Wherever practicable, and in order to avoid unnecessary expense, two exhibitions should be held on one day at two centres, i.e., one in the morning and one in the afternoon.

(3.) The County Committee shall give due notice to farmers in the county of the dates, etc., fixed for such exhibitions by means of posters, advertisements in the local newspapers, circulars, or such other method as may be deemed by the Committee to be the most effective and economical for the purpose.

(4.) The Secretary must send to the Department two copies of each such poster, advertisement, circular or other notice as soon as issued.

(5.) The Secretary shall receive entries for each exhibition on forms to be obtained from him. Each form must be signed by the owner of the mare, who must certify on the form that all the particulars given thereon are correct. Further, if required, this certificate must be attested by a magistrate.

(6.) Mares to receive nominations must be the bona-fide property of a farmer resident in the county (with the exception of the case provided for in No. 9 of this clause).

(7.) In order to secure the second of the main objects stated in Clause 1 of this scheme, preference will be given to the best young mares under six years of age.

(8.) Each mare must be the bona-fide property of a farmer, the tenement valuation in aggregate of whose holding or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Subject to such conditions as may be prescribed by the Department, breds' mares will be eligible to compete for nominations.

(9.) A farmer whose holding extends into more than one county may apply for a nomination in any one of the counties in which he holds land provided the aggregate tenement valuation of the holdings, wherever situated, and for which he is rated, does not exceed the limit fixed under (8) for the county in which he proposes to compete.

(10.) The mares to receive nominations shall be selected by a judge or judges appointed by the Department, and they must be passed free from any hereditary disease by a Veterinary Surgeon appointed for that purpose by the Department. The decisions of the judge and of the Veterinary Surgeon as to the suitability and soundness respectively of mares for nominations will be conclusive.

(11.) No farmer shall receive more than one nomination, unless the number of mares selected and reserved be insufficient for the granting of the full number of nominations allotted to the county, in which case a second nomination may be awarded.

(12.) At each local exhibition all eligible mares not selected for nominations shall be placed on a reserved list in strict order of merit.

(13.) Owners of registered stallions have a right to require hobbles to be used.

(14.) Owners of registered stallions may refuse service to mares suffering from a contagious disease; but the reasons for such refusal must be intimated immediately to the Department and to the County Committee by the stallion owner. Mares can be served only at their owners' risk.

22. The County Committee, with the approval of the Department, may—

(1.) subject to the provisions of Clause 10, restrict nominations to any one or more of the breeds of stallions on the Register;

(2.) refuse a nomination for any mare, without assigning any reason therefor;

(3.) for the purpose of identification, brand all mares selected for nominations;

(4.) require the owner of each nominated mare to deposit a sum not exceeding £2, such deposit to be refunded if the mare is served by the selected stallion or to be forfeited to the Committee in the event of the owner failing without sufficient cause to have the mare served by such stallion;

(5.) make regulations which will render a farmer who, without sufficient cause, fails to send his nominated mare to the selected stallion, ineligible to enter mares for nominations in subsequent years; and

(6.) make regulations in regard to any other matter under this scheme.

All approved regulations made under this clause by a County Committee shall take effect in the county as if incorporated in this scheme.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. (1.) The lists of owners of mares selected for nomination and of mares reserved must be submitted to the Department by the Secretary, within six days after the date of the last exhibition in the county, on the form supplied for the purpose.

(2.) The dockets for the selection of stallions and the service tickets will be supplied to the Secretary, when such form, complete, has been received by the Department. The selection dockets and service tickets shall then be filled in by the Secretary, who shall return them to the Department for the necessary check and authorisation for issue.

(3.) The Secretary, before issuing the selection docket, shall date it.

(4.) The service ticket must not be issued by the Secretary until the owner of the mare has returned to him the selection docket with the name of the selected stallion duly entered thereon by the said owner.

(5.) Not later than the 10th day of August, 1910, the Secretary shall forward to the Department, on the form provided for the purpose, particulars regarding the distribution of such tickets.

25. (1.) A farmer receiving a nomination must select one of the approved stallions in Ireland of the breed named by the County Committee under Clause 22 (1), provided the service list of the stallion selected is not already full. See Clause 26 (2).

(2.) Such farmer must insert on the selection docket the name of the stallion by which he wishes to have his mare served, and must return said docket so as to reach the Secretary not later than sixteen days from the date of issue of such docket.

He must also transmit with the docket the amount of the deposit, if any, fixed by the County Committee under Clause 22 (4).

26. In any one of the following cases the nomination shall be forfeited and shall lapse:—

(1.) If the farmer to whom a nomination is issued should fail to select a stallion within the sixteen day limit.

(2.) If the owner of the mare is also the owner of the stallion selected.

(3.) If the farmer to whom a nomination is issued should permit his nominated mare to be served by a stallion other than that originally selected.

(4.) If the nominated mare should die before first service.

(5.) If the nominated mare should be sold before the date of the first service.

(6.) If the nomination has been obtained through any misrepresentation.

The Secretary shall cancel and return to the Department the numbered tickets for all such lapsed nominations, and may issue to the owners of mares strictly in the order in which they appear on the reserve list new tickets to be obtained from the Department in lieu of such cancelled tickets.

27. A nomination is not transferable, and is available only for the selected mare.

28. The service season shall be reckoned to begin on the 1st day of March, 1910, and to terminate on the 31st day of July, 1910.

29. The value of the nomination fee shall be uniform for the county, but may vary with the breed of stallions selected, and shall be not less than £2, nor more than £3.

30. (1.) When the service fee exceeds the value of the nomination, the excess shall be paid by the owner of the mare to the owner of the stallion at the time of the first service, or at such other time as may be agreed upon between them.

(2.) In addition, the farmer shall pay a groom's fee of 2s. 6d. for each nominated mare.

31. (1.) Not earlier than the 1st August, 1910, and not later than the 1st October, 1910, the owners of stallions shall forward to the Secretary the selection docket and the service tickets for the services effected by their sires, accompanied by a statutory declaration to the effect that the conditions of service have been duly complied with.

(2.) The form of declaration required under this clause may be had on application to the Secretary.

(3.) The Secretary shall examine and check all these documents, and when certified by him as correct shall forward them to the Department.

(4.) Payment of nomination fees to owners of stallions shall not be made until the Department have been satisfied as to the fulfilment of the conditions of this scheme, and have signified in writing their approval of each particular payment.

32. No payment shall be made in any of the following cases—

(1.) Where any erasure or alteration appears on either the selection docket or the service ticket.

(2.) Where both the selection docket and the service ticket bearing corresponding numbers are not produced.

(3.) Where a nomination issued in respect of a particular nominated mare is used for another mare, whether nominated or not.

(4.) Where service has been effected by a stallion other than that originally selected.

(5.) Where an owner who received a nomination failed to send his mare for service.

(6.) Where the owner of a stallion fails to lodge by 1st October, 1910, with the Secretary, in the manner provided in Clause 31, his claim for payment of nomination fees.

33. Owners of mares accepting or agreeing to accept, from a stallion owner, portion of the service fee, changing nominations, substituting mares, or any person detected in any other fraudulent practices in connection with these regulations shall be debarred from obtaining any future benefits under the Department's schemes.

34. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS  
OF CATTLE.

1910.

1. The main objects of this scheme are to improve the dairy and store cattle in Ireland by encouraging the breeding or introduction of pure-bred bulls or registered dairy bulls of a high degree of excellence and by inducing associations of farmers or persons of means to purchase high-class bulls for the use of small farmers. When arranging the details of the scheme to suit local requirements each County Committee of Agriculture and Technical Instruction, or County Committee of Agriculture, as the case may be, hereinafter referred to as the County Committee, is requested to secure to small farmers as large a share of the resulting benefits as is practicable.

2. The sum to be provided by the Department under this scheme for encouraging improvement in the breeds of cattle in a county will depend on—(1) the amount of money provided in aid of the scheme by local authorities, (2) the special needs of the locality, and (3) the proportion which the amount of the local contribution bears to the genuine capacity of the locality to contribute.

In accordance with Section 16 (5) of the Agriculture and Technical Instruction (Ireland) Act, 1899, the Department will not, in the absence of special considerations, apply, or approve of the application of money under this scheme in a locality out of which aid is not given either by local authorities or from other local sources.

3. The joint fund available under this and other live stock schemes, comprising the grant from the Department and the money provided locally, will, subject to the approval of the Department, be administered in a county in accordance with the provisions of Clauses 6 and 7.

4. The Secretary of the County Committee, hereinafter referred to as the Secretary, whose appointment for the year and whose duties must first be approved by the Department, shall act as Secretary to the sub-committee for live stock.

5. It will be the duty of the Secretary to submit, for the approval of the Department, details of all schemes proposed for his county.

No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

6. The County Council should by resolution delegate to the County Committee full powers for the purposes of the Agriculture and Technical Instruction (Ireland) Act, 1899, and that committee should appoint from among their own members an executive sub-committee for live stock.

No payments, however, in connection with this scheme shall be authorised except by the County Committee.

7. The duties of the sub-committee for live stock will be to frame the details of the live stock schemes for the county in accordance with the conditions of the Department's general scheme, and to act as the executive committee for the administration of such county schemes when they have been approved by the County Committee and by the Department; but the executive sub-committee shall not have the power of authorising any payment in connection with these schemes.

8. The joint fund available under this scheme shall, after the expenses of administration are provided for, be applied solely in providing premiums for bulls.

9. In exceptional circumstances the Department may, under certain conditions to be prescribed by them, provide for a county either by purchasing bulls on behalf of applicants selected by County Committees under Clause 17, or by granting loans to approved applicants who desire to purchase bulls through the Department.

Applications for loans under this clause should be made—by the selected individuals—directly to the Department not later than 1st March, 1910.

10. Subject to the approval of the Department, premiums may be restricted to any one or more breeds of pure-bred bulls or registered dairy bulls.

11. Only bulls entered, or qualified by pedigree for entry, in the herd books of their respective breeds, or in the Department's register of Dairy Cattle shall be eligible for premiums. The owner of a pure-bred bull not entered must, if required, produce a certificate from the secretary of the herd book to the effect that the bull is eligible for entry and will duly appear in the next volume. (See Clause 16 (2). In the case of a registered dairy bull a certificate from the Department must be produced.

12. Bulls of the following ages are eligible to compete for premiums:—

- (1.) Yearlings, calved between 1st September, 1908, and 1st May, 1909,
- (2.) Two-year-olds, calved between 1st September, 1907, and 31st August, 1908;
- (3.) Three-year-olds, calved between 1st September, 1906, and 31st August, 1907;
- (4.) Four-year-olds, calved between 1st September, 1905, and 31st August, 1906.

All bulls must show a high degree of excellence. Two-year-olds, three-year-olds, and four-year-olds which show signs of having been badly cared, or which are not fully developed, will not be selected.

13. The amount of a premium for a high-class pure-bred bull (other than a Galloway, Kerry, Dexter, Welsh, or Ayrshire bull) payable, subject to the regulations of this scheme, at the end of the season shall be not less than £10 nor more than £15. Where special provision for the use of Galloway, Kerry, Dexter, Welsh, and Ayrshire bulls is made with the approval of the Department, the value of the premiums shall be £10. In the case of registered dairy bulls the premium shall be £10.

14. The owners of all two-year-old, three-year-old, and four-year-old bulls applying for premiums under this scheme must, if required, produce evidence of the fruitfulness of the bulls in the preceding year.

15. (1.) Bulls which were awarded premiums in 1909 will be inspected by the Department prior to the spring shows and sales, at places and on dates of which the owners will be duly advised by the Department.

In no case will animals be inspected at the owner's residence.

(2.) Owners of such bulls failing to present their animals for inspection on the dates selected will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of bulls which have been passed under this clause as eligible for premiums in 1910.

(4.) The County Committee shall then proceed to select applicants for premiums for bulls to be selected at any of the principal shows or sales of bulls. In making such selections regard shall be had to the needs of the various districts in the county, provided that no two bulls of the same breed shall be located in the county within three miles of each other.

(5.) A bull provisionally selected for a premium under this clause must stand for service at the same place as in 1909, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling bull.

16. (1.) Bulls, of the ages specified in Clause 12, other than those referred to in Clause 15 (3), shall be selected at the principal spring shows and sales. The provisional selection of bulls for premiums at these shows and sales shall be made by the Department alone.

(2.) Only those pure-bred bulls will be inspected for premiums the owners of which have given a written undertaking to the effect that when so required by the Department they will have their provisionally selected bulls duly entered in the herd books of the respective breeds.

(3.) Intending purchasers must make their own selection from the list of animals passed by the Department.

17. (1.) The County Committee shall, by means of advertisements in the local papers or by posters, invite applications from persons who, if

selected, are prepared to keep in districts not provided for in Clause 15, premium bulls to be purchased or exhibited at one or other of the principal shows or sales. Such applications must be made on forms to be obtained from the Secretary.

(2.) A list of such applicants, when selected by the County Committee, should be forwarded to the Department by the Secretary, on the form provided for that purpose, not later than five days before the show or sale at which the bulls are to be selected.

(3.) The Department's Inspector or Inspectors will attend at the principal shows and sales. They shall not be empowered to recognise applications from any persons attending the shows or sales whose names are not on the list supplied by the Secretary as having been duly selected to keep premium bulls.

(4.) Applicants selected by a County Committee exhibiting or purchasing at one of the principal shows or sales provisionally selected bulls of the breeds approved by the County Committee need not again show these bulls in 1910 for a premium. The granting of a premium to a bull shall not in any way be regarded as affording a right to a premium in a subsequent year.

(5.) As soon as a selected applicant has procured a bull which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter for the purpose. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to location, etc., of the bull, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The service season for a premium bull shall not commence until the owner of the bull has notified the Secretary on the form mentioned in Clause 17 (5) that he has procured a bull.

The service season for premium bulls shall close on 31st December, 1910.

19. The Secretary shall supply the owner of each premium bull under this scheme with posters, which such owner must undertake to distribute in the district in which the bull is to serve.

20. Each premium yearling bull shall serve not less than thirty cows, and all other premium bulls not less than forty cows each, other than those that are the property of the owner of the bull. The service fee for the number of cows stated shall be 1s. each, inclusive of all charges, but the County Committee may, if they think fit, fix the service fee at 2s. 6d. per cow, inclusive of all charges, in the case of farmers whose valuation exceeds the minimum limit fixed by the Committee. After the minimum number of cows have been served the owner may fix such fee as he may desire.

21. The County Committee may make such regulations as they think necessary with regard—

(1) to the inclusion or otherwise of four-year-old bulls,

(2) to requiring applicants for premiums to deposit with their application a sum not exceeding £2 in respect of each bull—such deposit to be refunded in case the applicant is not selected by the County Committee or if he procured a premium bull. The deposit to be forfeited to the County Committee in the event of the applicant omitting to procure a premium bull,

(3) to the number of premium bulls which any one person may keep, provided that no person shall possess two premium bulls of the same breed unless located at least three miles from each other (see Clause 15 (4)),

(4) to the place in which a premium bull shall remain during the season for service (see Clause 15 (5)),

(5) to requiring the owner of a premium bull not to keep any other bull on the farm on which such premium bull is located,

(6) to the penalties to be imposed upon the owner of a premium bull who fails to take proper care of the animal,

(7) to the number of cows which any one farmer may send to a premium bull,

(8) to requiring owners of premium bulls to exhibit their animals at some one of the shows subsidised by the County Committee,

(9) to requiring owners of premium bulls to retain their animals in the district until 1st September, 1910,

(10) to cancelling the award of a premium to a bull which is sold out of the country before it has served the prescribed number of cows,

(11) to the exclusion of pedigree cows from this scheme,

(12) to requiring selected applicants to purchase such premium bulls only as are certified to have passed the tuberculin test, and

(13) to any other matters affecting this scheme subject to the approval of the Department.

All regulations so made shall take effect as if incorporated in this scheme.

22. Each cow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding or holdings wherever situated and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans and *bona fide* agricultural labourers may obtain service for their cows on the same terms as farmers.

23. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

24. The owner of a premium bull shall not, before the stipulated number of cows have been served, reserve the use of the bull for the cows of any individual or of the members of any society. He must, subject to the provision of Clause 29, allow the bull to serve cows in the order in which they are presented.

25. The Department reserve the right to brand or mark premium bulls, and to inspect them from time to time.

26. The Department also reserve the right to apply the tuberculin test, at their own expense, to any premium bull. See Clause 21 (12).

27. All owners of premium bulls must satisfy the County Committee that they have provided themselves with a syringe and disinfecting materials for the washing of their animals after each service, in accordance with the instructions given in the Department's leaflet No. 13, on Contagious Abortion in Cattle.

It will be the duty of the Secretary to obtain the necessary information for the Committee, and to notify the Department at an early date of the results of his inquiries.

It will also be the duty of the Secretary to arrange that the owner of each premium bull shall distribute among owners of cows in his district a number of copies of the Department's leaflet No. 13.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of the bull being unable from any cause to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, according as the circumstances may require.

29. The owner of a premium bull has the right to refuse the use of his bull in any case where he is satisfied that the service would be prejudicial to the animal. The reasons for such a refusal, however, must, immediately on the refusal of the application, be communicated to the County Committee, who may take such action as they think fit subject to the approval of the Department.

30. (1.) Not earlier than 1st September, 1910, and not later than 15th January, 1911, the owner of a premium bull shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose cows have been served by the bull, at the fee named in Clause 23, together with dates of such services.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme the Secretary will be notified that payment of the premiums or part of the premiums payable under this scheme may be made to the owners of the bulls.

(4.) Any premium not applied for on or before 15th January, 1911, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.



DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

SCHEME FOR ENCOURAGING IMPROVEMENT IN THE BREEDS  
OF SWINE.

1910.

Clauses 1 to 7, inclusive, of the Department's Horse and Cattle Schemes, 1910, shall, with the necessary modifications, apply to this scheme.

SWINE.

8. The system to be adopted in connection with this scheme for encouraging improvement in the breeds of swine shall be the provision of premiums for selected boars.

9. Subject to the approval of the Department, premiums may be restricted to any one or more breeds of swine.

10. Only boars eligible for entry in the Herd-books of their particular breeds, in the Register of Pigs of the Royal Dublin Society, or in the Register of Ulster Swine established by the Royal Ulster Agricultural Society, shall be eligible for premiums. The owner of a boar selected for a premium must have the animal entered in the proper Herd-book or Register as the case may be.

11. Boars belonging to any Society or to any Association of Farmers shall be eligible to compete for premiums; but the premiums shall be paid to the Society or Association, and not to the individuals in whose charge the boars are placed.

12. A boar when selected for the first year's premium should be not less than five months nor more than twelve months old. The grant of a premium to any boar shall not be regarded as affording any right to a premium in a subsequent year.

13. The value of a premium shall be £5 for the first year, and £3 for the second year.

14. Only those boars which were awarded first year premiums in 1909 shall be eligible for second year premiums in 1910. All such boars must show a high degree of excellence. Two-year-old boars which show signs of having been badly cared for or are not fully developed will not be selected.

The owner of a boar selected for a second year premium must produce evidence of the fruitfulness of the boar in the preceding year.

15. A boar which may be awarded a premium in 1910 out of funds administered by any other body shall not be eligible for a premium under this scheme.

16. (1.) Boars which were awarded first year premiums in 1909 will be inspected by the Department at places and on dates of which the owners will be duly advised by the Department.

(2.) Owners of such boars failing to produce their animals for inspection on the date selected will not have their cases reconsidered.

(3.) The Department will furnish the County Committee as soon as practicable with a list of boars which have been passed under this clause as eligible for premiums in 1910.

(4.) The County Committee shall then proceed to select applicants for premiums for young boars. In making such selection regard shall be had to the needs of the various districts in the county, provided that no two boars shall be located in the county within three miles of each other.

(5.) A boar provisionally selected for a premium under this clause must stand for service at the same place as in 1909, and unless in exceptional circumstances approved by the Department, the owner will not be allowed to change the premium to a yearling boar.

17. (1.) The County Committee shall by means of advertisements in the local papers or by posters, invite applications from persons who, if

selected, are prepared to keep premium boars in districts not already provided for under Clause 16 of this scheme. Such applications must be made on forms to be obtained from the Secretary.

(2.) As soon as a selected applicant has procured a boar which has been provisionally passed for a premium he should notify the Secretary on a form to be obtained from the latter. The Secretary shall thereupon advise the Department on the prescribed form of the particulars as to the location, etc., of the boar, and obtain the sanction, in writing, of the Department with the least possible delay.

18. The provisional selection of boars for premiums shall be made by the Department alone at the principal spring shows and at other places to be fixed by the Department, but no inspection for the purpose of this scheme shall be made after the 30th June, 1910, save in exceptional circumstances.

19. The Department, through the County Committee, will, as far as practicable, assist intending purchasers to secure suitable boars for the purposes of this scheme.

20. The service season for a premium boar shall not commence until the owner of the boar has notified the Secretary on the form mentioned in Clause 17 (2) that he has procured a boar. The service season for premium boars shall close finally on the 31st December, 1910.

21. The Secretary shall supply the owner of each premium boar under this scheme with posters, which the said owner must undertake to distribute in the district in which the boar is to serve.

22. Each first year premium boar must serve not less than 30 sows, and each second year boar not less than 40 sows. The service fee, inclusive of all charges for this number of sows, shall not exceed 1s. for each sow. After the minimum number of sows have been served, the owner of the boar may fix such fee as he may desire.

23. The County Committee may make such regulations as they think necessary with regard—

- (1.) to the breed or breeds of boars to be selected,
- (2.) to the number of premium boars which any one applicant may possess (provided no person shall possess two premium boars unless located at least three miles from each other),
- (3.) to the place in which a premium boar shall remain during the season for service (see clause 16 (5)),
- (4.) to requiring the owner of a premium boar not to keep any other boar on the farm on which such premium boar is located,
- (5.) to the penalties to be imposed upon the owner of a premium boar who fails to take proper care of the animal,
- (6.) to the number of sows which any one farmer may send to a premium boar under this scheme,
- (7.) to requiring owners of premium boars to exhibit their animals at some one of the shows authorised by the County Committee,
- (8.) to requiring owners of premium boars to retain their animals in the district until 1st September, 1910, and
- (9.) to any other matters affecting this scheme subject to the approval of the Department.

All regulations so made shall take effect as if incorporated in this scheme.

24. Each sow shall be the property of a farmer resident in the county, the aggregate tenement valuation of whose holding, or holdings, wherever situated, and for which he is rated, does not exceed the limit fixed by the County Committee.

Herds, artisans, and bona fide agricultural labourers may obtain service for their sows on the same terms as a farmer.

25. The term "farmer" is to be understood to mean a person who derives his means of living mainly from farming.

26. The owner or owners of a premium boar shall not, before the stipulated number of sows have been served, reserve the use of the boar for the sows of any individual, or of the members of any society. Subject to the provisions of Clause 25, sows must be served by a premium boar in the order in which they are presented.

27. The Department reserve the right to brand or mark premium boars, and to inspect them from time to time.

28. In the event of infringement of or non-compliance with any regulation of this scheme or of a boar being unable, from any cause, to complete the prescribed number of services, the Department reserve the right to withhold the premium, or any part of it, or in any other way to deal specially with the case, according as the circumstances may require.

29. The owner of a premium boar has the right to refuse the use of his boar in any case where he is satisfied that the service would be prejudicial to the animal. The reason for such refusal must, however, be communicated to the County Committee immediately on the refusal of the application.

30. (1.) Not earlier than 1st September, 1910, and not later than 15th January, 1911, the owner of each premium boar shall forward to the Secretary on the prescribed form a return of the names, addresses, and valuations of the persons whose sows have been served by the premium boar—together with dates of such services—at the fee named in Clause 22.

(2.) The Secretary shall examine and check all such forms, and when certified by him as correct shall forward them to the Department.

(3.) As soon thereafter as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary will be notified that payment may be made to the owner or owners of the boar of the premium, or part of the premium, payable under this scheme.

(4.) Any premium not applied for on or before the 15th January, 1911, shall be considered as having lapsed.

31. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

#### Scheme No. 4.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### LOANS FOR THE PURCHASE OF STALLIONS. 1910.

1. Applications for loans for the purchase of Stallions must be made—on the prescribed form (A. 37)—direct to the Department.

2. No application for a loan for the purchase of a Stallion will be considered if coming from a locality in which, in the opinion of the Department, there is already a sufficient number of approved Stallions for the purpose of their scheme.

No loans will be made save for the purchase of Stallions accepted by the Department under the Horse-breeding scheme for 1910.

The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The individual or association (hereinafter referred to as the applicant) applying for a loan must be approved by the Department.

4. The purchase price of the Stallion must be approved by the Department.

5. The applicant must pay to the Department (1) one-third of the approved purchase price, (2) the amount of the stamp duty, and (3) the premium for the insurance of the Stallion at the full amount of the approved purchase price—the payment to the Department of this premium must be secured under conditions similar to those provided for the repayment of principal and interest. (See 7 and 8.)

6. On receipt by the Department of (1) one-third of the agreed on purchase money, (2) the necessary stamp duty, (3) the premium for insurance, and (4) a form of undertaking to have the necessary bond duly completed without delay, the Department will pay to the vendor the full amount of the agreed on purchase price, and will intimate to him that possession of the Stallion may be given up to the applicant.

If the vendor, before being paid by the Department, gives up possession of the Stallion, the Department will hold themselves free of any liability to the vendor.

7. As soon thereafter as possible the applicant, with two or more approved solvent sureties, shall enter into a bond to repay the Department the amount which will be advanced by them—viz., two-thirds of the purchase money—in five equal annual instalments, payable on the 1st November in each year, together with interest at the rate of 2½ per cent. on the outstanding balance. The first instalment shall be payable on the 1st November next succeeding the date of payment by the Department of the full purchase price to the vendor.

8. In the case of an association repayment must be guaranteed by the Committee of the association, or in such other manner as the Department may require.

9. The Stallion shall remain the property of the Department until all instalments or arrears of principal and interest are paid off, and shall not be disposed of, without the consent in writing of the Department, for five years.

10. The applicant must offer the Stallion each year for registration, must undertake to conform at all times to the regulations of the Department's scheme for the time being for encouraging improvement in the breeds of horses, and, during the continuance of the loan, must allow the Stallion to serve nominated mares at a fee to be fixed by the Department.

Such fee, however, shall in no case exceed £3 per mare.

11. Nominated mares the property of the members of an association purchasing a Stallion under this scheme shall not take priority of service over nominated mares owned by non-members.

As soon, however, as the number of nominated mares required by the scheme may have been saved, the service of the Stallion may be retained exclusively for the use of the members of such association.

12. The applicant must observe the following conditions:—

(1) In the event of the horse becoming ill or lame, he must without delay give notice in writing or by telegram to the Department. Like notice must be given—

(a) If the horse meets with any accident or injury, and

(b) If the horse dies. In the latter event he must furnish at his own expense a certificate from a Veterinary Surgeon.

(2) He must provide proper accommodation for the Stallion, and care it in a proper manner to the satisfaction of the Department.

(3) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

13. The Department shall have the right to inspect the Stallion at any time, and to remove it at any time, if it is found, in the opinion of the Department, that it is not being properly cared, or if an instalment of the principal and interest is in arrear for more than four weeks.

14. Should the Department grant a special subsidy in respect of the Stallion such subsidy shall not be paid to the individual or association in possession of the Stallion, but shall be credited, after the close of the season, towards the repayment of the loan.

15. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

#### Scheme No. 5.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### LOANS FOR THE PURCHASE OF BULLS.

1910.

1. Applications for loans for the purchase of Bulls should be made—on the prescribed form (A. 38)—direct to the Department before 1st March, 1910.

2. No application for a loan for the purchase of a Bull will be considered if coming from a locality in which, in the opinion of the Department,

there is already a sufficient number of pure bred Bulls for the purpose of their scheme. No loan will be granted save for the purchase of a pure bred Bull passed by the Department as suitable for a premium. The Bull must be of a breed approved by the County Committee. The Department reserve the right to refuse any application for a loan without assigning any reason for such refusal.

3. The purchase price of the bull must be approved by the Department.

4. The person applying for a loan under this scheme—hereinafter referred to as "the applicant"—must purchase through the Department, who cannot undertake to consider applications for loans in respect of animals purchased without their knowledge, at shows, sales, or from private individuals. The Department will, as far as possible, endeavour to procure a suitable animal for the applicant, but they cannot undertake to supply a Bull at a price fixed by him.

5. Before taking possession of the Bull the applicant will be required to pay to the Department's representative—(1) one-third of the approved purchase price, (2) the stamp duty, and (3) the charge for insurance (see Clause 9). Further, he must sign a form of undertaking to have the necessary form of guarantee for repayment duly signed and completed.

6. As soon thereafter as possible, the applicant and two approved solvent sureties shall sign a form of guarantee to repay to the Department the amount which will be advanced by them in two equal annual instalments, payable on the 1st day of April in each year, the first instalment to be payable on the 1st day of April in the year following that in which the bull was purchased, together with interest at the rate of  $2\frac{1}{2}$  per cent. on the outstanding balance.

7. In the case of an association the person in whose charge the Bull is to be placed must, with two other approved members of the association in their capacity of private individuals, guarantee repayment of the loan.

8. The Bull shall not be disposed of without the consent of the Department having been previously obtained in writing. The animal shall remain the property of the Department until all instalments of principal and interest are paid off.

9. The applicant must insure the Bull for the full amount of the purchase price with the Department. The fee for insurance against death shall be 5 per cent. on the full amount of the purchase price, and shall be paid to the Department.

10. The Department will insure the Bull with an insurance company for twelve months only from the date of payment of the insurance fee by the applicant. In the event of the death of the Bull before the expiration of the twelve months in question, the loan will be cleared off and the applicant will be refunded the part of the purchase price which he deposited with the Department on getting possession of the Bull, less interest on loan to date of death of the Bull.

It will be optional with the applicant to insure the Bull for a second year.

11. The applicant must observe the following conditions:—

(1.) In the event of the Bull getting ill or lame he must, without delay, give notice in writing or by telegram to the Department. Like notice must also be given (a) in the event of any accident or injury occurring to the Bull, and (b) in case of the death of the Bull.

(2.) He must take all reasonable precautions to prevent the Bull from coming into contact with any animal suffering from disease.

(3.) He must provide proper accommodation for the Bull and care it in a proper manner, to the satisfaction of the Department.

(4.) He must procure at his own expense a syringe and disinfecting materials for the washing of his Bull after each service, in accordance with the instructions given in the Department's leaflet No. 13 on Contagious Abortion in Cows.

(5.) He must procure at his own expense the services of a Veterinary Surgeon when necessary.

(6.) In the case of the death of the Bull he must forward a certificate from a Veterinary Surgeon or such other evidence as to the cause or fact of death as the Department may require.

12. The granting of a loan does not imply that a premium will be awarded in respect of the Bull.

Should the Bull be awarded a premium (1) the person in whose favour the loan is being granted must conform to the regulations of the Department's scheme for the improvement of the breeds of cattle, or any modifications therein made, with the approval of the Department, by the County Committee; and (2) the amount of such premium shall be paid to the applicant, after the provisions of the general scheme have been complied with.

13. The Department shall have the right

(a) to inspect the Bull at any time, and to remove it at any time, if it is found, in the opinion of the Department, that it is not being properly cared, or in the event of an instalment of principal and interest being in arrear for more than four weeks.

(b) to brand or mark the Bull;

(c) to apply the tuberculin test, at their own expense, to any Bull purchased under this scheme.

14. The decision of the Department in all matters relating to these loans shall be final.

Forms of application can be had from the Department.

## DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

### SCHEME OF SUBSIDIES TO AGRICULTURAL AND INDUSTRIAL SOCIETIES, ETC.

Memorandum for the information of Agricultural and Industrial Societies and other bodies applying for subsidies under the regulations of the above scheme.

Notwithstanding repeated warnings issued by the Department, there have been many instances during the past year in which difficulty has been experienced in securing compliance with the regulations of the scheme of subsidies to shows. Statements of the financial position of the Societies concerned have not been submitted in proper time, nor have the draft schedules of prizes been presented through the County Committees for the Department's consideration before same were printed.

The Department, therefore, desire to give notice that henceforth they will not be prepared to approve of the payment of a subsidy to any Agricultural or Industrial Society or other body unless all the requirements of this scheme are strictly complied with.

From time to time attention has been drawn to the matter of the amount of administration expenses incurred in holding shows and other fixtures. Such expenses are frequently out of all proportion to the value of the prizes actually distributed, and, accordingly, in future, approval cannot be given to the payment of subsidies to Societies which do not pay due regard to economy in administration.

The continuance of grants will depend, to a large extent, on the manner in which Show Societies co-operate in the general work of the County Committees and the Department. Much useful work can be done in this direction, and it is hoped that the members of each Society will aid the local Committees in their respective districts in arranging the numerous details necessary for the successful working of the several county schemes.

The accompanying copy of the scheme, issued for the year 1900-10, should be carefully perused, especially Clauses 1, 2, 4, 5, 6, and 11. It will be observed (Clause 2 (1)) that all Show Societies or other bodies desiring to obtain a grant under the scheme must, not later than 1st February, 1910, make application on the prescribed form to the County Committee, and must at the same time furnish certain specified financial particulars.

Copies of the form in question can be obtained on application to the Secretary of the County Committee.

Applications made later than 1st February, 1910, will not be considered by the Department.

October, 1909.

Scheme No. 6.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

SUBSIDIES TO AGRICULTURAL AND INDUSTRIAL  
SOCIETIES, ETC.

1909-1910.

1. County Committees of Agriculture may, subject to the approval of the Department and to the conditions of this scheme, grant subsidies to societies established for the purpose of—

- (a) Holding Agricultural, Poultry, Horticultural, and Farm Produce Shows; Industrial Shows or Exhibitions and Fairs; Skilled Labour Competitions, Implement Trials, Ploughing Matches, etc.
- (b) Obtaining for its members Analyses of Manures and Feeding Stuffs, Seed Tests, etc.

Provided, however, that the grant to any one Ploughing Match shall not exceed £5, irrespective of the number of competitors at such Match.

2. (1.) A show society, or other body, desiring to obtain a grant under this scheme must make application on the prescribed form not later than 1st February, 1910, to the County Committee, and must at the same time furnish the following particulars in respect of each show held by the society in 1909, viz. :—

- (a) A balance sheet duly certified to have been audited and found correct by two persons not being members of the committee of the show society or other body concerned, and setting forth in detail the financial position of the society after all liabilities have been discharged, and also
- (b) If required, a list certified by the Secretary of the show society or other body, setting forth the amounts actually collected in local subscriptions from private individuals in 1909.

*Any Society or other body which fails to furnish these particulars, or such further information as the County Committee and the Department may require, shall not be eligible to receive a subsidy.*

(2.) It shall be the duty of the Secretary to the County Committee, by means of advertisements or otherwise, to invite applications in accordance with the provisions of this scheme, from all societies or other bodies concerned, and to submit same with the necessary particulars to the County Committee as soon as possible, but not later than at a meeting of the Committee held in the month of February, 1910.

(3.) Not later than 1st March, 1910, the County Committee shall forward to the Department the foregoing documents together with their recommendations as to the distribution of funds available under this scheme.

3. In allocating the funds available under this scheme, County Committees should consider the claims of the various Shows held in the county and the special requirements of particular districts.

The County Committee in allocating a grant to any particular show, and the Department in approving of such grant, shall take into consideration :—

- (1.) The amounts actually collected in local subscriptions from private individuals in 1908 and 1909.
- (2.) The total value of prizes awarded in 1909, and the cost of administration.
- (3.) The regard paid by the society to the furtherance of the Department's live stock, poultry, and other county schemes.
- (4.) The amount set aside for classes confined to small farmers.

4. The prize schedule for 1910 must, prior to publication, be submitted through the County Committee to the Department for approval in writing.

The Department will not consider any schedule which has not previously received the approval of the County Committee.

5. The amount of the joint contribution from the County Committee and the Department must be acknowledged in the prize schedule.

6. In the case of live stock shows, other than shows confined to horses, provision must be made in the schedule of prizes for the inclusion of classes for sheep and swine and for poultry of the breeds subsidised by the County Committee.

7. Each society receiving a subsidy under this scheme shall, if required, afford all reasonable facilities for the inspection of their books by the Department, and shall admit the Department's Inspectors to the judges' ring during all adjudications on the day of the show.

8. Grants from the joint fund available under this scheme may be given to new show societies, provided the County Committee and the Department are assured :—

- (1.) That there is need for such new societies in the county;
- (2.) That adequate local support is forthcoming; and
- (3.) That the rules and financial proposals of the society are deemed satisfactory.

9. The cost of employing judges must be defrayed by show societies out of their own funds. The Department cannot undertake to supply the services of a judge or demonstrator for any show or competition.

If the County Committee approve, one or more of the instructors employed under county schemes may be permitted, for the purpose of giving demonstrations, to attend a show subsidised by a County Committee.

10. (1.) Immediately after the show or competition the Secretary of the society or other body shall furnish to the County Committee a certificate as to the total amount actually awarded in prizes, exclusive of cups and presentation prizes (the value of which should be stated separately), and the County Committee shall forward such certificate to the Department.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the County Committee will be notified that payment may be made to the show society or other body of the full amount of the subsidy or part of the subsidy as the case may be.

(3.) In the event of the total sum actually awarded in prizes at any show or competition being less than the sum originally voted by the County Committee, the show society or other body managing the show or competition shall not be entitled to receive payment from the joint fund of any sum exceeding the amount actually awarded in prizes, exclusive of cups and presentation prizes.

11. Non-compliance with any one of the foregoing regulations will render a show society or other body ineligible for a grant under this scheme, and will entail the cancellation of any subsidy proposed to be given by the County Committee to such show society or other body.

12. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

The Department recommend that each Agricultural or other Show Society receiving a subsidy under this Scheme should invite the County Committee to nominate one or more representatives to act on the Show Committee.



DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

PRIZES FOR COTTAGES AND SMALL FARMS,  
1910.

1. In 1910 County Committees of Agriculture may, subject to the Department's approval, offer prizes in one or both of the following sections, subject to the provisions of this scheme, viz.:—A. Cottages with gardens, B. Small farms.

In Section A County Committees may offer prizes in any one of the following ways:—(1) wholly in cash, (2) wholly in fruit trees and seeds, (3) partly in cash and partly in fruit trees and seeds.

A County Committee may delegate the working of this scheme to a society eligible for a grant under the scheme of subsidies to agricultural and industrial societies.

2. Competition in Section A shall be confined to *bona fide* cottagers as defined by the County Committee. Cottagers on whose holdings demonstration plots in connection with the scheme of instruction in horticulture are situated, shall, however, be ineligible to compete.

Only *bona fide* farmers who derive their means of living mainly from farming, who reside on their farms and work the farms themselves, will be eligible to compete in Section B. At least one-fourth of the arable land of the entire holding of each competitor in this section must be tillage, first year's grass or meadow being regarded as tillage.

National school teachers are ineligible to compete under this scheme.

3. For the purposes of this scheme the county may be divided into districts or circuits, in each of which separate competitions will be held.

4. Particulars as to the sections adopted, the number of districts or circuits into which the county is divided, the number of classes in each section, the limits of valuation or acreage fixed by the County Committee for each class, and the number and value of the prizes offered, must be submitted to the Department on the prescribed form for approval.

5. Entries must be made on special forms to be obtained from the Secretary of the County Committee. Each competitor must forward one of these forms, accurately filled up in every detail, so as to reach the Secretary of the County Committee on or before a date to be fixed by the County Committee, but in no case later than the 20th May, 1910.

No holding will be inspected in respect of which the owner fails to fill in an entry form.

6. In cases of insufficient competition, want of merit, or in which the conditions of this scheme have not been strictly adhered to, the prizes may be withheld in whole or in part.

7. The following points shall be taken into consideration by the judge in making his awards:—

COTTAGE SECTION.

- (a.) Cleanliness and general order of cottages and premises.
- (b.) Cultivation of the garden, including freedom from weeds, and well-kept fences and walks.
- (c.) Varieties of vegetables, fruits, and flowers.
- (d.) Arrangement of manure heap.
- (e.) General management and care of live stock, particularly pigs and poultry, special attention to be given to quality and housing.
- (f.) Management of hoes.

SMALL FARM SECTION.

- (a.) Cleanliness, order and economy in the dwelling-houses and offices (including poultry-houses).

- (b.) Judicious character of cropping, efficiency of cultivation, arrangement of manure heaps, and provision for collecting liquid manure.
- (c.) Cultivation of the garden, variety of vegetables and fruit trees.
- (d.) General condition of land under grass, care of fences, gates, water courses, &c.
- (e.) Judicious planting of shelter belts.
- (f.) Freedom from weeds, especially grass land, stack-yards and headlands.
- (g.) Cultivation of headlands.
- (h.) Management and care of live stock and poultry (quality to be particularly considered).
- (i.) Special credit will be given if simple accounts of receipt and expenditure in connection with any holding entered for competition (or with any branch of the work on the holding, such as cost of feeding cows or pigs, of rearing calves, of keeping poultry, etc.), are kept and exhibited to the judge.

8. The Department will supply, free of charge to the County Committee, the services of an Instructor to act as judge under this scheme.

9. The judge's report shall deal with such matters in connection with the competition as the Department and the County Committee may decide.

10. The inspection of cottages or small holdings entered for competition under this scheme will be made in the months of June, July, or August.

11. The Committee shall submit the judge's report, with list of awards, for consideration by the Department, who, as soon as they are satisfied as to the fulfilment of the conditions of this scheme, will notify the Secretary of the County Committee that the prizes or reduced prizes may be paid. The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary.

12. The County Committee shall furnish to the Department such detailed statements of expenditure under this scheme as may be required from time to time.

13. In all matters of dispute relating to this scheme the decision of the Department shall be final.

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#### Scheme No. 8.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

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#### SCHEME FOR ENCOURAGING IMPROVEMENT IN THE FLAX- GROWING INDUSTRY,

1909-10.

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The following programme has been adopted by the Department for encouraging improvement in the flax-growing industry during the season 1909-10.

#### I.—FIELD EXPERIMENTS.

Variety tests and manurial experiments will be continued. The object of these experiments is to ascertain the relative value of various varieties of flax seed and the influences of certain manures on the yield and quality of the flax crop. Experiments on seed selection may also be undertaken. A report on the experiments carried out in 1908 will be published in the Department's *Journal*, and will be distributed in leaflet form.

#### II.—COLLECTION OF STATISTICS.

Statistics with reference to the flax crop will be again collected through scutchmill owners and the managers of co-operative flax societies.

## III.—FORMATION OF FLAX SOCIETIES.

The Department, subject to the conditions to be prescribed by them, are prepared in a limited number of cases to assist farmers in establishing co-operative flax societies by paying a portion of the salary of an approved manager for a period not exceeding three years.

Applications for assistance of this nature should be made to the Secretary of the Department.

## IV.—PRIZES FOR GROWERS, &amp;c., OF FLAX.

County Committees of Agriculture in the flax-growing counties may adopt either or both of the following sections :—

- (A.) Prizes for scutched flax.  
(B.) Prizes for flax on foot.

## SECTION A.

For the purpose of this section a county may be divided into districts, in each of which a show of scutched flax may be held, at which it is suggested the following prizes be offered :—

(A.)—*Growers.*

First prize,	.	.	.	£3.
Second prize,	.	.	.	£2.
Third prize,	.	.	.	£1.

(B.)—*Scutchers.*

Scutchers employed in the mill where the first prize lots were scutched :—

£2.

Scutchers employed in mills where the second prize lots were scutched :—

£1.

(C.)—*Other employees.*

For other persons employed in the mill where the first prize lots were scutched :—

£2.

Similar employees in mills where the second prize lots were scutched :—

£1.

(D.)—*Mill-owners.*

*This class may be omitted if the County Committee so desire.*

Owners of mills in which the first prize lots were scutched :—

£2.

Owners of mills in which the second prize lots were scutched :—

£1.

## SECTION B.

For the purpose of this section the county may be divided into districts, in each of which prizes for flax on foot may be offered, e.g. :—

(a.) For growers the valuation of whose holding does not exceed £10, and who grow at least half a statute acre of flax or sow at least  $\frac{1}{2}$  bag of seed.

(b.) For growers the valuation of whose holding exceeds £10 but does not exceed £25, and who grow at least one statute acre of flax or sow at least  $\frac{1}{2}$  bag of seed.

(c.) For growers the valuation of whose holding exceeds £25 but does not exceed £50, and who grow at least two statute acres of flax or sow at least 1 bag of seed.

(d.) For growers the valuation of whose holding exceeds £50, and who grow at least three statute acres of flax or sow at least  $1\frac{1}{2}$  bags of seed.

*N.B.*—The limits of valuation in the foregoing classes are not prescribed; they are merely inserted as an indication to County Committees to encourage the smaller grower.

The County Committee may require growers entering flax for competition under this section to pay an entry fee.

When judging growing crops the judge shall take into consideration:—

- (a.) Freedom of crop from weeds;
- (b.) Uniformity of crop;
- (c.) Length and quality of crop.

#### GENERAL REGULATIONS.

1. A County Committee adopting this scheme should appoint a special sub-committee for flax, which must be restricted to six members, each of whom should be an experienced flax grower or scutchmill owner; and this sub-committee should be given full authority to administer the county scheme when sanctioned in writing by the Department.

2. The sub-committee shall be responsible for organising shows under section A, and for making all arrangements in connection with sections A and B; but no payments under this scheme shall be authorised, except by the County Committee.

3. The County Committee shall, by means of advertisements in the local papers and by posters, invite applications on special forms from persons in the county desirous of competing for the prizes offered under this scheme. Copies of these posters must be forwarded to the Department.

4. Not less than six weeks before the date of the first show, when section A has been adopted, and not later than 31st March, 1910, in the case of section B, the County Committee must submit, for the approval of the Department, on the form provided for the purpose, a complete statement showing:—

In regard to section A—(1) the classes to be provided at each show; (2) the quantity of flax to be exhibited by one person in each class, which should not be less than 10 stones; (3) the number and value of the prizes to be offered; (4) the place, suggested date, and hour of each show; (5) the instructions to exhibitors, together with such conditions of award, in addition to the compulsory provisions in the following clauses as the Committee may consider desirable.

In regard to section B—(1) the number of districts into which it is proposed to divide the county; (2) the limits of valuation in each class; (3) the number and value of prizes in each class; (4) the amount of the entry fee, if any, to be charged.

5. All growers of flax shall be eligible to compete for prizes in sections A and B, subject to the regulations of this scheme.

6. Under neither section shall a grower be paid more than one prize during the season, and under section A no individual can receive a prize both as a grower and as a mill-owner.

7. If, in the opinion of the judge, the flax exhibited under section A, or the crop inspected under section B does not show sufficient merit, the prizes must be withheld.

8. If it be discovered that any fraud, deception, or dishonest practice has been committed, either in connection with the preparation or ownership of the scutched flax or growing flax, or in any representation regarding exhibits of flax—scutched or growing—which may have affected, or have been intended to affect, the decision of the judge or judges, the offending person shall be disqualified, and shall be debarred from obtaining any future benefits under the Department's scheme. He shall also forfeit any

claim in respect of prizes awarded under this scheme. The Department reserve the right to publish the names of such persons if deemed expedient.

9. No action shall be taken by the County Committee towards putting any portion of this scheme into operation until the sanction of the Department to the Committee's proposals has been obtained in writing. The scheme, when sanctioned by the Department, must be considered as final for the year.

10. The County Committee shall, subject to the approval of the Department, appoint a competent judge or judges under this scheme. The person appointed under section A must not be a resident of the county in which he is to act.

The person appointed under section B may act as judge in the county in which he resides, but not in the district, as defined in this scheme, in which his residence is situated.

11. (1.) Not later than six days after the holding of each show the Secretary of the County Committee shall submit to the Department for approval, on the form provided for the purpose, a statement showing the name and address of each of the prize-winners under section A, and the amount of the prize to which each winner is entitled. (2) Similar returns in respect of competitions in section B should be furnished to the Department within one week after the work of judging has terminated. (3) The awards will not be final until the sanction of the Department has been conveyed in writing to the Secretary of the County Committee.

12. The Secretary of the County Committee shall keep a separate account of expenditure in connection with each section of this scheme, and shall furnish same to the Department when required.

13. Subject to the foregoing regulations being complied with, the Department will be prepared to refund County Committees 50 per cent. of all authorised expenditure under this scheme.

14. The decision of the Department in all matters of dispute in connection with this scheme shall be final.

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Scheme No. 9.

**DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.**

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**INSTRUCTION IN AGRICULTURE, 1909-10.**

1. The Department are prepared to approve of the appointment of at least one Instructor in Agriculture for each county in Ireland, provided the County Committee can secure the services of persons qualified for the position. In the case of new appointments no person shall be eligible for an Instructorship in the county of which he is a native, or in which he resides permanently.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not, except in special cases, exceed £200 per annum (inclusive of maintenance and hotel expenses), in addition to expenses of locomotion, which include second or third-class railway fare as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1910, and shall be terminable at any time previous to that date by the giving of three months' notice in writing on either side.

4. (1.) It will be the duty of the Instructor, who should take every opportunity of discussing with farmers matters affecting their interests—

(a) to conduct such experiments and demonstrations in spring and summer as may be approved by the Department, to select suitable land for the purpose—to supervise the sowing of the seeds and

manures, and the keeping of the plots free from weeds—to weigh the produce, tabulate the figures and prepare a report on the results;

(b) to deliver lectures on agricultural subjects, such as soils, manures, seeds, pastures, crops, and their cultivation, and the breeding, feeding, and management of live stock especially of dairy cattle;

(c) to visit farms;

(d) to reply to letters from farmers seeking information;

(e) to advise farmers (i.) how they can take advantage of the Department's Seed Testing Station, (ii.) as to the planting of forest trees for shelter and ornament, (iii.) how they can best avail themselves of all approved county schemes, and (iv.) how they may take advantage of agricultural co-operation;

(f) to make known the provisions of the Fertilisers and Feeding Stuffs Act, and of the Destructive Insects and Pests Acts;

(g) to furnish to the County Committee and to the Department, as may be required, reports on the progress of his work and on matters relating to the agricultural industry of the county; and

(h) generally to give his whole time to the work and to do all in his power to further the interests of agriculture in the county.

(2.) The Instructor may also be required (a) to assist in the teaching of winter agricultural classes, (b) to assist in carrying out the provisions of the scheme for the registration of dairy cattle, by the weighing and testing of milk, &c., and (c) to act as judge in connection with the scheme of prizes for cottages and small farms in a county other than that in which he acts as Instructor.

NOTE.—The employment of the Instructor to teach winter agricultural classes will not relieve him of his other duties under this scheme, and accordingly when he is occupied in teaching for four days in a week the Instructor should deliver at least one lecture in the same week on a day when not engaged in teaching, as well as attend as far as practicable to the other branches of work above mentioned. If occupied less than four days a week in teaching such classes, the number of lectures and demonstrations should be correspondingly increased.

5. The Instructor shall, so far as the moneys allocated by the County Committee will permit, make arrangements to have experimental and demonstration plots in each section or circuit into which the county may be divided under Clause 6, and during the summer months meetings of farmers should be held at these plots to discuss the objects, &c., of the plots. In selecting sites for plots preference should be given to localities in which agricultural classes have been held during the preceding winter.

During the winter months—viz., from the beginning of October to the end of February—the County Committee should arrange for one or more lectures in each circuit, on the results of the experiments.

6. For the purposes of this scheme County Committees will find it convenient to divide the county into a number of sections or circuits, in which the Instructor should work in turn.

When it is intended that a lecture should be given in a particular locality, the County Committee should appoint a small local committee, who should undertake to secure the necessary accommodation for the purpose and to arrange for the lighting, heating, &c., of the room in which the lecture is to be delivered. No work of this nature should be undertaken by the Instructor.

The County Committee are responsible for seeing that the Instructor's time is fully and usefully employed, and that he pays due regard to the performance of the duties for which he is appointed. With this end in view, the County Committee should take such steps as may seem to them most effective to make known to farmers in the county that an Instructor is available to afford advice on all matters affecting their interests.

The County Committee shall obtain the Department's approval in writing for all payments in respect of materials for experiments and demonstrations, and articles of equipment required by the Instructor, and shall keep a separate account of all expenditure under this scheme. Detailed statements of such expenditure as may from time to time be required shall be furnished to the Department by the County Committee.

7. It will be the duty of the Secretary of the County Committee to furnish such returns in connection with this scheme as the Department may require; to forward to the Department copies of all advertisements, posters, or handbills issued by the Committee; and to keep an inventory, and be responsible for the safe-keeping, of all equipment provided for the purposes of this scheme.

8. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

9. In all matters of dispute relating to this scheme the decision of the Department shall be final.

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Scheme No. 10.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

WINTER AGRICULTURAL CLASSES,

1909-10.

1. The County Committee may employ as teacher for agricultural classes (1) for four days per week, the Itinerant Instructor in Agriculture, who has previously worked in the county, if approved of by the Department, or (2) an approved teacher or assistant Instructor who would devote his whole time to the classes.

In the event of the Itinerant Instructor being employed as teacher, he shall devote the remaining two days of the week to duties in connection with the scheme of itinerant instruction in agriculture.

2. (1.) The aim of the instruction is to impart such knowledge as is capable of direct practical application to farm work. The subjects taught will be as follows:—Soils, tillages, manures (natural and artificial), seeds, grasses, weeds, treatment of pasture, cropping, management of live stock (including winter dairying), valuation of manures and feeding stuffs, simple farm account keeping, mensuration, elementary chain surveying, and elementary science explanatory of the principles underlying ordinary farm practice. As far as possible the lessons should be illustrated by practical demonstrations.

As each centre special attention will be devoted to farm calculations in connection with the cost of growing crops or raising stock, with direct reference to the practice prevailing in the district.

(2.) The County Committee may arrange for a few outdoor demonstrations in the planting and after treatment of fruit trees, to be given to the students by the County Instructor in Horticulture, but no lectures on horticulture shall be given.

3. (1.) In order to bring the classes within the reach of as many young men as possible, it will be necessary for the teacher in each county to give instruction at two or three centres, at each of which he shall attend for three or two days weekly, during a period of about sixteen weeks, from November to March. Unless in exceptional circumstances, centres at which agricultural classes have been held previously shall not be selected under this scheme.

(2.) In fixing the days of the week on which the classes are to be held at any centre, the County Committee should have regard to the dates of fairs and markets, as well as to any local circumstance which might interfere with the attendance of students on certain days.

4. (1.) The County Committee shall, by means of advertisements in the local newspapers and by posters and leaflets, invite applications for admission to the classes. Copies of these posters and leaflets must be forwarded to the Department as soon as issued.

The County Committee may make such regulations as they think necessary with regard to—

- (a) the maximum age of students to be admitted to the classes; and
- (b) the admission to classes of students who have previously attended similar classes, provided that admission to an elementary class shall not be approved in the case of any student who has attended two previous classes.

(2.) Applications for admission to the classes must be made to the Secretary of the County Committee, on forms provided by him for the purpose.

(3.) Admission to the classes will be conditional on the applicants' satisfying the Department that their general education is sufficient to enable them to benefit by the instruction given.

(4.) The classes shall be held in the morning and afternoon, and the hours of attendance shall be arranged to suit as far as possible the convenience of students who travel by rail. Instruction in subjects mentioned in Clause 2 (1) of this scheme shall be given for at least four hours each day.

(5.) The classes shall be confined to young men over sixteen years of age, who are actually engaged in farm work in the county, and not more than twenty-four students shall be admitted at any centre. If the number of students eligible for admission at a centre is less than ten, the class proposed for that centre shall not be held. Provided, however, that, subject to the approval of the Department, the County Committee, if a sufficient number of students over sixteen years of age is not available, may, if they think fit, admit young men over fifteen years of age.

(6.) No fee will be charged for the course. Students must provide, at their own expense, note-books and other stationery, as directed by the teacher.

5. Students who reside beyond a radius of four statute miles from the class centre will, at the end of the course, be allowed the cost of third-class railway tickets, or one penny for each mile travelled by road, provided that their attendance and progress are regarded by the Department as satisfactory. No student will be regarded as having attended satisfactorily who shall not have been present at five-sixths of the meetings of his class, unless his absence shall have been due to illness or other unavoidable cause.

6. (1.) It is recommended that a County Committee adopting this scheme should appoint, from amongst their own members, a special sub-committee of not more than six members, and that this sub-committee should be given authority to administer the scheme when sanctioned in writing by the Department.

(2.) The sub-committee should be responsible for organising the classes and making all arrangements in connection therewith. No alteration in the details of the scheme, as approved by the Department on form A/196, shall be made without the Department's approval in writing having been first obtained. No payments, under this scheme, shall be authorized except by the County Committee.

7. It shall be the duty of the teacher of Agriculture to keep a register of attendance of the students on the form provided, and in the manner prescribed by the Department.

8. The Secretary of the County Committee shall—

(1.) Submit on the prescribed form, for the approval of the Department, the details of the scheme as proposed for the county;

(2.) At the earliest possible date after the opening of the classes, furnish to the Department, on the prescribed form, a return of the students in attendance, showing for each student the mode of travelling to the class and the daily mileage;

(3.) Obtain the Department's approval, in writing, for all payments in connection with this scheme, and keep a separate account of all such payments;

(4.) Keep an inventory, and be responsible for the safe keeping of all equipment provided for the purposes of this scheme;



(5.) Immediately after the close of the course, take charge of the equipment provided for the classes, and furnish a list of the same to the Department;

(6.) Submit to the Department a return of the attendance of the students and of the travelling allowances payable to them under this scheme.

9. In all matters of dispute relating to this scheme, the decision of the Department shall be final.

NOTE.—If these classes are entered under the Department's revised scheme for the administration of grants to schools other than day secondary schools, the regulations of that scheme must be strictly observed.

## WINTER AGRICULTURAL CLASSES.

### SYLLABUS OF THE COURSE.

Brief sketch of Origin and Formation of soils. Conditions influencing fertility. Soil improvement by draining, liming, &c.

Study of a plant, and the functions of roots, stem and leaves; modification of these organs. Elements of plant food and their relative importance from an agricultural point of view. Conditions affecting the development of plants. Examination of the habits of growth and duration of the principal crops and weeds found on the farm, and the practical application of this knowledge.

Farmyard manure: its storage and application. Organic and artificial manures. Composition, description and identification of artificial manures; their valuation, time and manner of application. Mixing manures. Special manures. Fertilisers and Feeding Stuffs Act.

Rotations. Cultivation, Seeding, Manuring and Harvesting of the principal farm crops. Forage and Cattle crops. Study of the commoner insect pests and fungoid diseases of crops.

Characteristics, duration and adaptability for various purposes of grasses and clovers in farm practice. Identification of the different species and varieties.

Identification of farm seeds and the commoner impurities and adulterants. Germination and purity tests, how performed; the inferences to be drawn therefrom. Change of seed. Grass seed mixtures. Weeds and Agricultural Seeds Act.

Care and management of various classes of farm stock, with special reference to breeding, feeding and housing. Principal breeds of live stock; and their characteristics.

Composition of foods; their respective functions and value in animal nutrition. Valuation; manurial value. Description and uses of home-grown and purchased feeding stuffs. Impurities and adulterants. Rations for various classes of farm stock. Methods of using foods.

Secretion of milk; composition; conditions influencing the quality and quantity of the milk yield. Care and treatment of milk for new milk trade or butter-making. Cream ripening. Milk records. Respective merits and demerits of the several systems of dairying. Summer and Winter dairying.

Rules for estimating the areas of the principal geometrical figures met with in chain surveying and farm calculations. Field Book, method of entering measurements; calculation and computation of areas. Practical work with the chain in the field. Plotting from the field book to green scales. Location of drains, &c., on the plans for future reference.

Method of keeping a diary, cash book, and a record of credit transactions. Farm valuations and stocktaking. Balance sheets: their interpretation. Estimates of the cost of various farm operations, &c.

A course in Veterinary Hygiene intended to indicate the treatment to be adopted in cases of accidents to or simple ailments of farm stock, and to enable students to carry out intelligently the instructions of the Veterinary Surgeon. To this end demonstrations will regularly follow class work.

The following is a draft syllabus of the course:—Homing of Stock. Necessity for Cleanliness. Importance of Ventilation. Treatment of Wounds. Nature and Seat of Splints, Spavin, Curbs, Ring-bone, and Side-bone. Structure of the Foot. Shoring of Horses. Diseases affecting the Foot. Digestive Organs, and Common Diseases of the same. Digestion by Ruminants. Respiratory Organs. Colds; Laryngitis, Choking; Congestion of the Lungs; Broken Wind; Roaring. Disinfection. The Commoner Gorm Diseases, such as Tuberculosis, Influenza, Glanders, Strangles, Anthrax, Blackleg, and Navel-ill. Dentition. Demonstrations in Pulse, Respiration, and Temperature. The Administration of Medicine to Farm Stock. Bandaging. Tests for Soundness. Post Mortem Examination. The Care and Treatment of Mares at Foaling, Cows at Calving, and Ewes at Lambing.

Scheme No. II.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

INSTRUCTION IN POULTRY-KEEPING,

1909-10.

1. The Department are prepared to approve of the appointment of at least one Instructor in Poultry-Keeping for each county in Ireland, provided the County Committee can secure the services of persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he or she is a native or in which he or she resides permanently.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. Unless in exceptional circumstances the remuneration of the Instructor shall not exceed £5 per week, in addition to expenses of locomotion, which include second or third class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1910, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of a female Instructor will terminate as a matter of course on her marriage.

4. It will be the duty of the Instructor to deliver courses of lectures on poultry-keeping; to conduct classes and give practical instruction and demonstrations on the treatment of common diseases, such as gapes, &c., on the fattening of fowls and on the killing, plucking, trussing, and preparation of poultry for market; to visit poultry runs, and give such practical advice as may be desired by poultry-keepers; to inspect the egg distribution and turkey stations referred to in Clauses 10, 13, and 14, to assist selected applicants to procure suitable stock birds; to report to the Department and to the County Committee regarding the progress of his or her work either weekly or otherwise as may be required; and generally to give his or her whole time towards promoting improvement in poultry-keeping in the county.

5. For courses of lectures the county should be divided into circuits, each comprising not less than five centres. The Instructor, except in special cases, should work for at least four weeks in each circuit, and deliver one lecture per week at each centre during that time. The Instructor will be prepared to visit either on the day of the lecture or on the following day, any of the poultry runs in the neighbourhood, and give such information on poultry-keeping as the circumstances of the case may suggest.

The County Committee are alone responsible for the selection of centres and the arrangement of lectures and classes. No work of this nature

should be undertaken by the Instructor, though it is desirable that he or she should be consulted.

6. It will be the duty of the County Committee to select centres at which the lectures and classes will be held and to appoint a local committee, with an honorary secretary, at each centre, who should select the school and arrange for the hiring, lighting, and warming of the room in which the lectures will be delivered. In selecting centres the County Committee should have particular regard to districts in which lectures or classes may not have been held in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

The Secretary of the County Committee shall keep an inventory, and be responsible for the safe-keeping, of all equipment provided.

7. Lectures and classes should be arranged, wherever possible, to be given in schoolrooms or other suitable public rooms, and should be held in rural centres only. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those meetings which are held in the rural parts of a county, especially in districts where the greatest number of those interested in poultry-keeping is to be found. The local committee at each centre should be responsible for appointing a representative chairman for each lecture, as well as for the distribution of the short syllabus which will be prepared by the lecturer as soon as appointed. The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout the circuit. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of instruction. Each lecture should be followed by a discussion, during which farmers and others interested in poultry-keeping will be invited to ask questions relative to their business. Where a course of lectures has already been given a new syllabus should be presented.

8. The lectures should commence early in autumn and be continued until the end of the hatching season. If employed during the summer months, the Instructor should, during that season, conduct practical classes, in accordance with the provisions of Scheme No. 12, visit poultry runs and inquire into, and advise upon, outbreaks of disease.

9. In addition to the preliminary inspection of applicants' premises, the Instructor will be required to make at least two complete inspections of all hen and duck stations, and two inspections of geese and turkey stations in the county between the 1st October and 31st May. The Instructor shall submit weekly to the County Committee and to the Department on the prescribed form a report on all stations inspected during the preceding week.

#### DISTRIBUTION OF SITTINGS OF EGGS OF PURE BRED.

##### *Hens and Ducks.*

10. In counties where instruction in poultry-keeping has been provided, the Department are prepared to sanction a limited number of premiums of £5 each being awarded to approved applicants, selected by the County Committee, who distribute during the season at least 80 sittings of eggs (twelve eggs to count as a sitting); those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of stations must continue selling eggs at the fixed price until 31st May. The owner may set eggs for his own use, but such sittings will not count towards a premium. Applicants must agree to comply with the following conditions:—

(1.) To keep one pure breed of hens only. In exceptional cases the Department may approve of more than one pure breed being kept, provided they are satisfied that the selected person, houses, runs, birds, &c., are suitable. Only one breed of ducks can be kept.

(2.) To sell or destroy any existing fowl on the premises of which the Instructor or the Department may disapprove, and not to bring on the premises, during the period for the distribution of eggs, fowl of any description without the sanction of the Instructor and of the Department.

(3.) To keep no male birds on the premises other than those sanctioned for stock purposes of the approved breed or breeds of hens or ducks.

(4.) To dispose of the male birds in use during 1908-9 and to replace these with others unrelated to the stock at the station.

5. When a premium is claimed for hens alone, to keep not less than thirty or more than sixty of the selected breed. If the premium is claimed in respect of hens and ducks, not less than five ducks and twenty-five hens must be kept, or ten ducks and twenty hens, but the total number of birds to be kept at any one station should not exceed sixty. At least one cock or cockerel must be kept for every ten hens or pullets, and one drake for every five or six ducks.

(6.) To replace each year at least one-third of the hens with early-hatched pullets.

(7.) To provide proper housing where such does not already exist, and in the case of two breeds being kept to provide a separate run for each to the satisfaction of the Instructor and the Department. The area of run for any flock of birds will require to be at least twenty square yards per bird.

(8.) To feed and care the birds in such a manner as the Instructor and the Department may require.

(9.) To supply, during the season specified in par. (11.) below, sittings of eggs from the selected birds to any person in the county at 1s. per dozen (the purchaser to bear the cost of package and carriage), and to replace infertile eggs that are returned within one month from the date on which they were sent out.

In special cases the Department may sanction an increase in the price of eggs, provided the County Committee show sufficient reasons for so doing.

(10.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(11.) To keep in a special book provided by the County Committee an accurate record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for by either of these bodies. The books must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on the 1st December, 1909, and terminate on the 31st May, 1910. (See Clause 18.)

(12.) To permit the Instructor and the Department to inspect the birds at any time.

Any infringement of the above rules may entail the cancellation of the premium.

11. The following breeds of hens and ducks will alone be recognised :—

#### Hens.

##### *Laying Breeds.*

Black Minorcas. White Leghorns. Brown Leghorns.

##### *General Purpose Breeds.*

Plymouth Rocks (Barred variety recommended). Orpingtons (Buff and White recommended). White Wyandottes. Salmon Favonelles, Sussex.

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Only in the case of those stations at which Houdans were kept, under the 1908-9 scheme, with the approval of the Department, will the same breed be approved under this scheme. Houdans, however, will not be recognised in any future year.

## DUCKS.

Indian Runner. Aylesbury. Pekin. Rouen.

12. An additional grant of 50 per cent. of the actual cost, but in no case exceeding £2, may be made to selected persons who provide themselves for the purpose of this scheme with portable wooden fowl-houses approved by the Department. This will apply only to persons who are taking up the scheme in 1909-10 for the first time. No grant will be made in respect of improvements in an existing house, and if a new house is obtained it must be portable.

## GESE.

13. A limited number of premiums of £2 each may be offered to persons selected by the County Committee, and approved by the Department, who will undertake to comply with the following conditions:—

(1.) To keep only one pen of birds, viz.—a gander and three geese of the Embden breed.

(2.) To sell or dispose of any existing geese on the farm, of which the Instructor or the Department may disapprove, and not to bring on the farm, during the period for the distribution of eggs, geese of any description without the sanction of the Instructor and of the Department.

(3.) To keep no gander on the farm other than that sanctioned for stock purposes.

(4.) No gander shall be retained for more than three years at any one station. A gander which has been for three years at one station must be replaced by a bird unrelated to the stock at the station.

(5.) To sell not less than 12 sittings of eggs to residents in the county; those who distribute less will be paid in proportion to the number distributed. No maximum number of sittings to be distributed is prescribed, but owners of stations must continue selling eggs at the fixed price until 31st May, 1910.

(6.) To sell the eggs at 1s. 6d. per sitting—three eggs to count as a sitting—(purchaser to defray the cost of package and carriage where necessary). Each applicant to be restricted to one sitting.

(7.) To provide proper housing where such does not already exist. The birds to have access to suitable shelter at all times, and to be hand-fed, when a sufficient amount of natural food is not obtainable, in such a way as the Instructors and the Department may require.

[NOTE.—Only those applicants who possess an adequate supply of water will be approved as keepers of geese stations.]

(8.) To stamp all eggs given out with a stamp provided for the purpose by the County Committee.

(9.) To keep in a special book provided by the County Committee an accurate record of all eggs laid and distributed. This book must be sent to the Secretary of the County Committee or to the Department when asked for by either of these bodies. The books must be returned to the Secretary of the County Committee at the end of the distributing season, which will commence on 1st January and terminate on 31st May, 1910.

(10.) To permit the Instructor and the Department to inspect the birds at any time.

Any infringement of the above rules may entail the cancellation of the premium.

## TURKEYS.

14. A limited number of premiums of £2 each may be offered to persons selected by the County Committee and approved by the Department who will undertake to comply with the following conditions:—

(1.) To keep one pure-bred American Bronze stock turkey cock for the service of turkey hens, the property of residents in the county. Twenty hens other than those belonging to the station holder must be served, at a fee of 6d. per service, by an approved turkey cock. If a smaller number are served, the premium will be proportionately reduced. After twenty hens have been served the owner may refuse to allow the bird to serve more or may charge a higher fee. The stock birds must be not less than the following weights on 1st January, 1910, viz.:—Cockerels, 22 lbs.; adult birds, 28 lbs. Birds more than three years old are not eligible for premiums.

(2.) To provide proper housing accommodation, and to feed and care the bird in such a manner as the Instructor and the Department may require.

(3.) To keep no turkey cock other than the bird approved for the purpose of this scheme.

A station-holder under the 1908-9 scheme will not be eligible to hold a premium under the 1909-10 scheme unless the bird kept in 1908-9 is exchanged or an approved new bird purchased.

A premium may be granted for a turkey cock selected in 1908-9, provided the bird is suitable in every respect, and is located at a different station either in the same or in another county.

(4.) To keep in a special book, provided by the County Committee, an accurate record of services. This book must be sent to the Secretary of the County Committee or to the Department when required, and in any case must be returned to the Secretary of the County Committee not later than the 7th June, 1910.

(5.) To permit the Instructor and the Department to inspect the birds at any time.

Any infringement of the above rules may entail the cancellation of the premium.

## GENERAL.

15. An applicant will be eligible for one premium only in respect of each of the following:—(a) hens or hens and ducks, (b) geese and (c) turkeys, but the same person may hold premiums for (a), (b) and (c). No premium however, will be given for ducks alone.

16. (1.) As soon as the Instructor has been appointed and the number of premiums proposed to be awarded has been approved of by the Department, the County Committee shall invite applications from persons in the county who already possess, or are willing to purchase, pens of the approved pure breeds of hens and ducks, or geese, as the case may be, or to keep one pure-bred turkey cock, and who are prepared to comply with the above conditions. When these applications have been received the Instructor shall, without delay, inspect and report to the County Committee as to the number of suitable applicants. The names of the applicants selected by the County Committee, with full particulars as to the breeds, number of birds, and housing, should then be submitted, on the prescribed form, for the approval of the Department, who may thereupon further inspect the selected farms, and submit a list of those of which they approve to the County Committee for their final selection.

(2.) The County Committee may make such regulations as they think fit with regard to requiring applicants for premiums to deposit with each application a sum not exceeding 10s. Such deposit to be refunded if the applicant is not selected by the Committee or being selected complies with all the conditions of the county scheme. The deposit to be forfeited to the County Committee in the event of the applicant when selected failing to comply with all the conditions of the county scheme.

17. The Department will not consider applications from a county in respect of premiums under this scheme later than 1st December, 1909.

County Committees who intend to adopt this scheme should have all arrangements completed prior to the 1st January, 1910.

18. (1.) Not later than 7th June, 1910, the selected applicants for premiums must forward to the Secretary of the County Committee the record books referred to in Clauses 10 (11), 13 (9), and 14 (4), accompanied by a certificate that the entries in these books are correct, and that all the conditions of this scheme have been complied with.

(2.) As soon as the Department are satisfied as to the fulfilment of the conditions of this scheme, the Secretary of the County Committee will be notified that payment may be made by the Committee of the premiums or portions thereof payable under this scheme.

(3.) Any premium not applied for by the 7th June, 1910, shall be considered as having lapsed.

19. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

20. In all matters of dispute relating to this scheme the decision of the Department shall be final.

#### Scheme No. 19.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### TUTORIAL AND PRACTICAL CLASSES IN POULTRY-KEEPING, 1909-10.

1. The Department are prepared to approve of the holding of Tutorial and Practical Classes in Poultry-Keeping by the Itinerant Instructors in Poultry-Keeping in counties where circumstances justify the introduction of this form of instruction.

2. Classes will be held at each selected centre for at least two but not more than three weeks, and daily instruction of not less than two hours' duration will be given.

At least eight pupils must be enrolled at each centre, but not more than fifteen pupils will be admitted to any class.

No pupil under fifteen years of age will be entitled to receive instruction, and pupils must undertake to attend regularly.

3. It will be the duty of the Instructor—

(a.) To give instruction in the subjects suggested in the syllabus, but the Instructor should consider the requirements of the place as well as the season of the year and select subjects accordingly. Each day's work should commence with a discourse and demonstration, the pupils taking notes, and should be followed by practical instruction. Diagrams, models, and blackboard illustrations should be used as far as possible.

The pupils should be required to take as full notes as possible; these should be carefully checked and corrected by the Instructor in her spare time.

At the end of each week the Instructor should question the class on the week's work, and should hold a short examination at the end of the course.

(b.) To visit poultry runs every day in her spare time, especially at the homes of pupils, and advise as to requirements. The general conditions of management should be gone into with the pupil, mistakes pointed out, and improvements suggested. The fowl-houses should be examined, and such points as accommodation, ventilation, lighting, perching, limewashing, etc., attended to where necessary. The preparation and mixing of the food might also be carried out by the pupil under the direction of the Instructor.

(c.) To arrange for the distribution of the Department's leaflets applicable to the subjects dealt with at the classes.

(d.) To keep a register of attendance of the pupils, recording therein such particulars as the Department may require.

(e.) To furnish a report weekly to the Department and to the County Committee on the prescribed form.

4. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary and for a good and regular attendance of pupils.

The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre.

The centres should be selected in rural districts, and large towns and villages should be avoided.

No centre should be selected unless the Committee have good reason to believe that the instruction provided will be availed of to the fullest extent.

It will be the duty of the Secretary of the County Committee to keep an inventory, and be responsible for the safe keeping, of all equipment provided.

#### SYLLABUS.

##### (a.) SUBJECTS FOR DISCOURSE AND DEMONSTRATION.

I. *Breeds best suited to district.*—(1) for egg production; (2) for table; value of first crosses for both purposes. Describe points of (1) a good layer, (2) a good table fowl; and illustrate the difference between same.

II. *Breeding and selection of stock.*—Enumerate advantages of pure breeds over mongrel fowls, and point out the value of selection for desired points, e.g., laying strains, etc. (Illustrate by diagrams and black-board.)

III. *Houses and Housing.*—Suitable houses, illustrated by models or black-board sketches. Colony system; other systems; principles of housing, such as situation, shelter, materials to use, size of house, ventilation, light, flooring, fittings (nest boxes and perches); care of houses; importance of cleanliness; danger from parasites (red mite).

IV. *Chicken Rearing.*—Conditions necessary for success. When to hatch for (1) stock birds; (2) egg production; (3) market. Describe simple hatching box and how it might be made. Provide a hatching box and hen. Demonstrate on making the nest and setting the hen. Mention precaution necessary against rats and insect vermin. Explain the importance of fresh ground for chickens.

Describe best kind of coop and how to use it. (Illustrate by model or black-board.)

V. *Feeding.*—Importance of suitable food. Best foods: how to use them for (1) rearing and fattening table poultry; (2) egg production. Give approximate quantities and prices of foods; show samples of feeding stuffs, grits, etc. Special attention should be paid to suitable foods of a simple character within the reach of those who are being instructed.

VI. *Selecting and Testing Hatching Eggs.*—Kind of eggs to select; demonstrate with suitable and unsuitable eggs. Condition necessary to obtain fertile eggs; describe a fertile, infertile, and added egg (black-board illustrations and specimens). Explain the use of testing, demonstrating with a hand-bester.

VII. *Marketing of Eggs.*—Necessary conditions, with special reference to size, cleanliness, freshness; production of winter eggs.

VIII. *Egg Preservation for Home Use.*—Best preservatives and how to use them. Demonstrate with butter, vaseline, or water-glass.

IX. *Fattening.*—Different methods; value of trough feeding; use of pellets; importance of observing proper methods as to fasting, killing, plucking, stubbing, singeing, shaping, cooling, packing, grading, ventres. These methods might be explained, and brief notes given in preparation for practical work.

X. *Simple Accounts and Egg Records.*—Explain advantages and refer to books, see page 6.

XI. *Diseases.*—Explain symptoms, cause and treatment of the more common diseases, making special mention of the importance of fresh ground, isolation, etc., as a means of prevention.



*Suggested Demonstrations.*

(1.) Dissection of two birds, showing and explaining the effect and appearance between the organs of a healthy and diseased specimen. (2.) Dissection of a chicken with gapes; explaining symptoms, cause, preventive and curative treatment, and demonstrating the effect of fumigation. (3.) Dissection of an over-fat hen, showing and explaining effect of accumulated fat on the egg-producing and other organs. (4.) Careful removal of the digestive organs of a fowl, explaining in detail their uses.

## (b).—PRACTICAL WORK IN WHICH PUPILS SHOULD TAKE PART.

*Fattening.*—Hand cramming; the use of pellets.

*Preparing Poultry for Table and Market.*—Killing, plucking, studding, singeing, shaping by tying down, packing.

*Trussing.*—Chickens and ducks.

*Packing sittings of eggs* and small boxes of fresh eggs for private trade.

*Examination of organs of a bird.*—Specimens of different organs of a bird to be kept after trussing, pupils to identify same, and to explain their functions.

## ADDITIONAL SUBJECTS.

The following subjects are suggested to meet special requirements:—*Ducks, Geese, and Turkeys*, their rearing and management.

*The Composition of an Egg.*—Description of its composition; the use and association of the various parts in the formation of the chicken.

*Demonstrations.*—Simple operations; the use of simple medicines; the making of simple appliances such as feeding troughs, drinking vessels, nest boxes, chicken coops, hatching boxes, etc.

## TABLE OF WORK—EXAMPLE.

## FIRST WEEK.

## MONDAY.—(Opening Day.)

Previous to hour of class the Instructor should visit the appointed place to unpack outfit and make final arrangements.

*Discourse and Demonstration.*

Fattening (†No. IX).—Killing, plucking, etc., and shaping fowl.

*Practical Work.*

Killing, plucking, etc., shaping (tying down).

TUESDAY.—*Discourse and Demonstration.*

Breeds best suited to district (†I); Trussing.

*Practical Work.*

Trussing.

WEDNESDAY.—*Discourse and Demonstration.*

Feeding (†V.); Dissection of digestive organs.

*Practical Work.*

- (1.) Killing, plucking, etc., shaping (tying down).
- (2.) Pellet Cramming.

THURSDAY.—*Discourse and Demonstration.*

Houses and Housing (†III.); Packing dead birds for market.

*Practical Work.*

- (1.) Packing birds for market.
- (2.) Trussing.
- (3.) Pellet Cramming.

† These numbers refer to syllabus.

**FRIDAY.—Discourse and Demonstration.**

Marketing of eggs (†VII.); Pocking sittings of eggs and small boxes of fresh eggs for private trade.

**Practical Work.**

Packing sittings of eggs and fresh eggs for private trade.

**Class Work.**

Questions to class on week's work, explaining correction of notes.

**SATURDAY.**—Visiting poultry yards of pupils and others in the district, and giving practical advice according to requirements.

**SECOND WEEK.****MONDAY.—Discourse and Demonstration.**

Chicken rearing (†IV.); Demonstration on making nest and setting hen.

**Practical Work.**

(1.) Killing, plucking, shaping.

(2.) Packing sittings of eggs and fresh eggs for private trade.

**TUESDAY.—Discourse and Demonstration.**

Selecting and testing hatching eggs (†VI.); showing and explaining use of hand tester.

**Practical Work.**

(1.) Trussing.

(2.) Pellet Crumming.

**WEDNESDAY.—Discourse and Demonstration.**

Demonstration; Dissection of two birds, showing and explaining the effect and appearance between the organs of a healthy and diseased specimen.

**Practical Work.**

Killing, plucking, shaping (tying down), etc.

**THURSDAY.—Discourse and Demonstration.**

Demonstration; Dissection of a chicken affected with gapes; explaining symptoms, cause, preventive and curative treatment, and demonstrating the effect of fumigation.

**Practical Work.**

Trussing.

**Class Work.**

Keeping of accounts.

**FRIDAY.—Discourse and Demonstration.**

Egg preservation for home use, showing how to use one or more preservatives (†VIII.).

**Class Work.**

Résumé of work of course; Examination (written, one hour's paper).

**SATURDAY.**—Packing outfit and moving to new centre.

**BOOKS.**

Specimen account books are supplied to the Instructor, and each pupil should be recommended to procure one from Messrs. Dollard & Co., Printinghouse, Dublin. Price 6d., postage extra.

Specimen books of Egg Record forms for the keeping of monthly returns are supplied to the Instructor, and additional copies will be forwarded to pupils who are willing to undertake the keeping of records.

† These numbers refer to syllabus.

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## TUTORIAL AND PRACTICAL CLASSES.

*List of Articles required for Outfit, with approximate cost.*

	s. d.	£ s. d.
* 2 Folding Tables, . . . . .	@ 9 9	0 19 6
* 8 Trussing Boards, . . . . .	@ 0 10	0 6 8
* 8 Trussing Needles (8" x 10"), . . . . .	@ 0 2	0 1 4
* 8 Trussing Knives, . . . . .	@ 1 0	0 8 0
1 Stone for Sharpening, . . . . .		0 0 6
* 8 Stabbing Knives, . . . . .	@ 0 7	0 4 8
2 Choppers, . . . . .	@ 0 8	0 1 4
16 Swab Cloths, . . . . .	@ 0 3	0 4 0
* 1 Fattening Pen (Indoor), . . . . .		0 5 0
* 1 Blackboard (36" x 30"), . . . . .		0 5 0
Strong, Painted (36" x 24" size, 4s. 6d.).		
* 12 Farm Produce Boxes (No. 1), . . . . .	@ 0 1	0 1 0
* 4 Farm Produce Boxes (No. 3), . . . . .	@ 0 3	0 1 0
* 2 Folding coops for treatment of sick birds, . . . . .	@ 2 6	0 5 0
* 2 Zinc Buckets, . . . . .	@ 1 9	0 3 6
* 1 Large Scrubbing Brush, . . . . .		0 1 0
* 1 Small Scrubbing Brush, . . . . .		0 0 6
* 6 Tin Perringers (2-pint size), . . . . .	@ 0 2½	0 1 3
* 6 Plucking Baskets, . . . . .	@ 2 0	0 12 0
8 Enamel Plates, . . . . .	@ 0 5	0 4 4
1 Spring Hook Weighing Machine (40 lbs.), . . . . .		0 4 9
(55 lb. size, 7s.).		
7 Sheets of Millboard (30" x 20") (for mounting illustrations), . . . . .	@ 0 6½	0 3 9½
4 Do. (15" x 15") do., . . . . .	@ 0 4	0 1 4
1 Egg Tester, fitted with black diaphragms for three sizes of eggs; post free, . . . . .		0 1 3
1 Patent Egg Testing Lamp; carriage paid, . . . . .		0 3 0

Messrs. George Perry and Co., Ltd., Camden-row, Dublin, & s. d.  
are prepared to supply the above-mentioned articles at the prices stated, on the following conditions:—

Cost of packing the above, . . . . . 0 4 0  
(Part outfit in proportion.)

All f.o.r. Dublin, prices net.

Six days required to execute orders. A written requisition, signed by person authorized to purchase, must be furnished.

Contractors will not hold themselves responsible for delay in delivery of any articles on the list not of their own manufacture, nor will they give the option of any article supplied to order being returned.

The Knives can also be procured from the Irish Cutlery Manufacturing Co., Ltd., 17 Merchants' Quay, Dublin, and the Egg Tester and Lamp from Messrs. Hughes Bros., 29 Dawson-street, Dublin.

- 1 Dissecting Case, containing 2 metal-handle scalpels, 1 scissors, 1 forceps; post free, . . . . . 0 7 9  
This case may be obtained from Messrs. Fennin and Co., 41 Grafton-street, Dublin.

SUPPLIES, viz. :—

Samples of foods and grits, with tin boxes (½ lb. size); wood wool; fumigating powder and bellows for "Gapes"; small supply of drugs, viz. :—Carbolic Acid, Friar's Balsam, Potassiumate of Potash, Powdered Sulphur, Epsom Salts, Chlorodyne, Insect Powder, etc., estimated price, . . . . . 1 5 0

These articles might be purchased according to requirements; it should be possible to obtain them locally.

£6 15 5

\* Irish Manufacture.

Arrangements have been made for the supply of the following illustrations, which will be issued direct on application to the Department :—

- 1 Set of Poultry Illustrations (Seven Plates),
  - 1 Set of Anatomy Illustrations (Four Plates).
- (Each illustration to be mounted on millboard by the Instructor.)

Scheme No. 13.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

INSTRUCTION IN BUTTER-MAKING.

1909-10.

1. The Department are prepared to approve of the appointment of at least one Instructor in Butter-making in each county in Ireland, provided the County Committee can secure the services of persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which she is a native or in which she permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not exceed £2 per week, in addition to expenses of locomotion, which include second or third class railway fare as decided by the County Committee, car-hire when necessary, or a bicycle allowance not exceeding 2d. per mile in lieu thereof.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th September, 1910, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

The appointment of an Instructor will terminate as a matter of course on her marriage.

4. The instruction will take the form of daily lessons on dairying, accompanied by practical instruction in butter-making. Each course shall extend for a period of not less than two, and not more than four weeks. Not more than twelve pupils should be admitted to each class. Pupils must undertake to attend regularly.

It is desirable that pupils should be at least 15 years of age.

5. On the first day of visiting each centre the Instructor should give a public lecture and demonstration, and during the remainder of the course at that centre should conduct a class daily in which pupils only will take part, but which shall be open to the public.

The Instructor shall keep a register of attendance of the pupils, recording therein such particulars as may be required by the Department.

It will also be the duty of the Instructor to visit home dairies in the county and to give advice as required; to give, where possible during that part of the day not required for class work, demonstrations in the making of butter, by means of the equipment actually in use in the dairies visited; to reply to letters from persons seeking advice on butter-making; to report to the Department and to the County Committee on the progress of her work either weekly or otherwise as may be required; and generally to give her whole time to the work of the Committee.

6. It will be the duty of the County Committee to select suitable centres at which classes will be held, and to appoint at each centre a local committee, with an honorary secretary, who will be responsible for the local arrangements necessary for the proper carrying out of the work, and who will be required to comply with the annexed conditions. The local committee should undertake to have posters and hand-bills, which will be supplied by the Secretary of the County Committee, effectively displayed in the neighbourhood of the centre. Copies of these posters and hand-bills

should be forwarded to the Department at least a week prior to the commencement of each class.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

7. (a) The Secretary of the County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish such detailed statements of that expenditure as may from time to time be required by the Department.

(b) He shall also keep an inventory of and be responsible for the safe keeping of all equipment provided for the purposes of this scheme.

8. To avoid expense and to ensure success these classes should be held, as far as possible, in schoolrooms or other suitable buildings in rural centres. Unless in exceptional circumstances no class should be held in a large village or town, or near a creamery.

The County Committee are alone responsible for the selection of centres and arrangement of lectures. No work of this nature should be undertaken by the Instructor, though it is desirable that she should be consulted.

9. No action shall be taken by the County Committee towards putting this scheme into operation until the sanction of the Department has been obtained in writing.

#### CONDITIONS REQUIRED OF LOCAL COMMITTEES.

I. To secure premises suitable for a working dairy, if possible not less than 25 feet by 18 feet, or other dimensions affording similar floor space. Either a public room, schoolroom, or barn with good floor, would be suitable for the purpose.

II. To secure a sufficient supply of water.

III. To provide on the premises means of heating at least fifteen gallons of water at one time, for use in cleaning utensils, &c.

IV. To provide sufficient milk or cream for use at the class, the Committee taking responsibility of sale of butter.

After the opening day at each centre about three gallons of milk and six gallons of cream will be required for each day's work. Arrangements should be made to have the milk and the cream delivered in the morning.

V. To guarantee not less than six and not more than twelve pupils to attend on each of the days over which the course of instruction extends.

VI. To arrange for the carriage of utensils from one centre to another. The weight of the utensils is usually from 25 to 30 cwt., and they are somewhat bulky.

The Department recommend the following list of utensils for a travelling dairy school attended by twelve pupils:—

	Approximate Cost.
6 End-over-End Churns, at 23s.	£ 138 0 0
6 Butter Workers, at 37s. 6d.	11 5 0
6 Butter Boards, at 2s.	0 12 0
4 Large Butter Boards, at 3s. 6d.	0 14 0
6 Scoops, at 1s.	0 6 0
6 Sieves, at 2s. 6d.	0 15 0
6 Pair Scotch Hands, at 2s. 6d.	0 15 0
6 Squares, at 1s.	0 6 0
6 Scrubbing Brushes, at 1s.	0 6 0
6 Thermometers, at 1s. 6d.	0 9 0
6 White Enamelled Buckets, at 5s. 6d.	1 13 0
6 Iron Buckets, at 4s. 6d.	1 7 0
4 Shallow Tins (Cream), at 4s.	0 16 0
1 Pair Scales.	0 10 0
1 Set Iron Weights (7, 4, 2, 1, $\frac{1}{2}$ , & $\frac{1}{4}$ lb.).	0 4 6
1 Set Brass Weights (2, 1, $\frac{1}{2}$ , & $\frac{1}{4}$ oz.).	0 5 6

	£	s.	d.
1 Set Creamometers,	0	6	6
1 Lactometer,	0	1	0
1 Gerber Butter-fat Tester (2 Bottles), about	2	10	0
1 2-Quart Measure,	0	2	6
4 Quart Measures, at 1s. 9d.,	0	7	0
4 Pint Measures, at 1s. 3d.,	0	5	0
2 Skimmers, at 8d.,	0	1	4
1 Hand Separator (17 gallons per hour),	7	10	0
1 Portable Boiler (15 gallons),	2	14	0
	262	10	10

The above equipment allows one churn, one butter worker, and one set of the smaller utensils for two students. A dash churn may be included in the equipment when the County Committee deem it desirable.

#### LOANS FOR THE PURCHASE OF HAND SEPARATORS.

Particulars of the conditions on which these loans are made to farmers occupying holdings valued at £50 and under may be obtained on application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin.

Letters of application so addressed need not be stamped.

Scheme No. 14.

*Special attention is directed to Clause 2.*

#### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### INSTRUCTION IN HORTICULTURE AND THE MANAGEMENT OF BEES, 1909-10.

1. The Department are prepared to approve of the appointment of at least one Instructor in Horticulture and Bee-keeping for each County in Ireland, provided the County Committee can secure the services of persons qualified for the position. In the case of new appointments no person shall be eligible for the position of Instructor in the county of which he is a native, or in which he permanently resides.

The Department will, as far as possible, assist County Committees in obtaining Instructors by supplying the names of qualified persons.

2. The remuneration of the Instructor shall not, unless in exceptional circumstances, exceed £2 per week, in addition to expenses of locomotion, which include second or third-class railway fare, as decided by the County Committee, car hire when necessary, or a bicycle allowance, not exceeding 2d. per mile in lieu thereof. If a motor cycle is used 3d. per mile may be allowed.

3. The employment of the Instructor under this scheme shall not continue beyond the 30th of September, 1910, and is terminable at any time previous to that date by the giving of four weeks' notice in writing on either side.

4. It will be the duty of the Instructor to give demonstrations and, if approved, to deliver lectures on horticultural subjects, such as seeds,

manures, vegetable, fruit, and flower cultivation, plant diseases, and insect pests—to visit gardens and orchards, and give practical demonstrations on spraying, planting, pruning and grafting of fruit trees—to conduct such experiments and other demonstrations in the spring and summer as may be approved by the Department—to select suitable land for this purpose—to supervise the sowing of the seeds and manures, and the keeping of the plots free from weeds—to give instruction in the principles and practice of modern bee-keeping—to deal with diseases of bees, plants, and trees—to advise farmers, cottagers, and others interested in land, as to the planting of trees, &c., for shelter and ornament—to reply to letters from those seeking his advice on horticultural and bee-keeping subjects—to give practical outdoor demonstrations to students attending winter agricultural classes—to report to the Department and to the County Committee on the progress of his work either weekly or otherwise, as may be required; and generally to give his whole time to the work and to do all in his power to further the interests of horticulture and bee-keeping in the county.

He will be required to carry out such duties as may be assigned to him in connection with any Orders issued by the Department under the Destructive Insects and Pests Acts, 1877 and 1907. Further, it will be his duty to report to the County Committee the names and addresses of persons in the possession of bushes on which he has detected, or has reasonable grounds for suspecting the existence of any disease or pest referred to in such Orders.

5. The Instructor shall report to the County Committee on all cases of foul brood which may come under his notice, and shall act as Inspector of the County Committee for the purposes of the Bee Pest Prevention (Ireland) Regulations, 1909.

6. For the purposes of this scheme the county should be divided into circuits, and the Instructor shall give outdoor demonstrations for three or four weeks in each circuit. The Instructor shall visit gardens, orchards or apiaries in the district, and give such information on practical subjects as the circumstances of the case may suggest. In cases, however, where an Instructor may be employed to give instruction in bee-keeping only it will not be necessary to divide the county into circuits. In such instances demonstrations can be arranged at centres from which applications have been made through the Secretary of the County Committee for his services.

The County Committee are alone responsible for the selection of centres for demonstrations. No work of this nature should be undertaken by the Instructor, though it is desirable that he should be consulted.

7. It will be the duty of the County Committee to select centres at which demonstrations shall be given.

In selecting centres the County Committee should have particular regard to districts in which lectures and demonstrations may not have been given in previous years.

It will also be the duty of the County Committee to undertake the responsibility of seeing that the Instructor's time is fully and usefully employed.

The County Committee shall keep a separate account of all expenditure under this scheme, and shall furnish detailed statements of such expenditure as may from time to time be required by the Department.

8. Where it is considered desirable, with the approval of the Department, to arrange for lectures, the lectures should be given in schoolrooms or other suitable public rooms in the evenings, and should be held in rural centres. Towns and the larger villages should be avoided, as experience has shown that the greatest success attends those lectures which are given in the rural parts of a county. The local committee at each centre should be responsible for appointing a representative chairman for each lecture as well as for the distribution of the short syllabus of the lectures which will be prepared by the lecturer as soon as he is appointed. The local committee should undertake to have posters and handbills, which will be supplied by the Secretary of the County Committee, effectively displayed and distributed throughout their district. Copies of these posters and handbills should be forwarded to the Department at least a week prior to the commencement of each course of lectures. Each lecture should be

followed by a discussion, during which persons interested in horticulture and bee-keeping will be invited to ask questions. Where a course of lectures has already been given a new syllabus should be presented.

9. The County Committee may purchase fruit, forest and other trees, shrubs, or plants, in bulk, and resell them at cost price, including carriage, to farmers and other residents in the county. As, however, it has come to the knowledge of the Department that trees and plants infested with disease have been imported into Ireland, it will be necessary for County Committees who intend to put this clause into operation to invite from nurserymen tenders for the supply of trees, &c., to be guaranteed free from disease, and before acceptance to submit the tenders to the Department for examination on or before 1st day of January in each year. The Department may, if they think it advisable, inspect the trees, &c., that are offered for sale, and satisfy themselves that the trees, &c., are suitable and free from disease.

10. The horticultural demonstrations should commence early in autumn and be continued throughout the whole year.

11. In each district one demonstration plot may be provisionally selected for the purpose of growing vegetables, fruit, and flowers, and showing improved methods of cultivation, but no new plots shall be selected in a county if a sufficient number of suitable plots have been established in previous years.

Before sanctioning the establishment of a new plot the Department must be satisfied as to the suitability of the site, &c. (See Clause 12).

Demonstration plots under this scheme may not be established in connection with National or other primary schools or teachers' residences.

(a) In counties in which a sufficient number of suitable plots, approved by the Department under this scheme, already exist, the Committee shall make provision for the continuance of the plots at a cost not to exceed £1 per lot. (See List A.)

All requisite labour must be given gratuitously by the owner of the plot, who will be entitled to the produce.

(b) In cases where it is necessary to establish new plots the Department will require compliance with the following regulations:—

(1) Plots must not exceed a quarter of an acre in extent, or be less than one-eighth of an acre (quarter-acre plots are recommended).

(2) No new plot shall be established save at a convenient centre adjacent to a main road.

(3) Plots should be selected on sites which are properly fenced.

(4) The aspect of each plot and the nature of the soil must be suitable for vegetable growing and fruit cultivation. Necessary improvements, such as drainage, must be carried out, and when required farmyard manure must be supplied by the plot owner without expense to the Committee.

(5) The owner of the plot must sign an undertaking to continue the plot for three years.

(6) The necessary labour must be given gratuitously by the persons providing the plots—the produce to be their property.

The cost of trees, &c., required for planting a new plot must not exceed £2. (See List B.)

[NOTE.—The Department recommend that allotments attached to labourers' cottages should be selected for the establishment of new demonstration plots subject to the foregoing conditions.]

12. The Department's approval in writing must be obtained before any expense is incurred in connection with the establishment of a plot, and application for such approval must be accompanied in each case by a detailed report from the Inspector.

13. No action shall be taken by the County Committee towards putting this scheme, or any part thereof, into operation until the sanction of the Department has been obtained in writing.

14. In all matters of dispute relating to this scheme the decision of the Department shall be final.

[APPENDIX.



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## LIST A.

SEEDS RECOMMENDED FOR HORTICULTURAL DEMONSTRATION PLOTS  
ALREADY ESTABLISHED.

## Vegetables and Flowers.

Variety.	Quantity.	Price. s. d.
Peas, ...	1 qt.	2 0
Cabbage, Early, ...	1 oz.	0 9
Savoy, ...	1 oz.	0 4
Brussels Sprouts, ...	1 oz.	0 6
Broccoli, ...	1 oz.	0 9
Carrots, ...	1 oz.	0 6
Parsnips, ...	1 oz.	0 6
Onions, Spring, ...	1 oz.	1 0
Autumn, ...	1 oz.	0 8
Leek, ...	1 oz.	0 6
Lettuce, ...	1 oz.	0 6

## Flower Seeds.

Sweet Pea, ...	1 packet	1 0
Mignonette, ...	1 "	0 3
Candystuff, ...	1 "	0 3
Wallflower, ...	1 "	0 3
Nasturtium, ...	1 "	0 3

10 0

## Artificial Manures.

Sulphate of Potash, ...	8 st.	10 0
Nitrate of Soda, ...	8 st.	
Superphosphate, ...	4 st.	

Total, £1 0 0

## LIST B.

PLANTS AND SEEDS RECOMMENDED FOR NEW HORTICULTURAL DEMONSTRATION  
PLOTS, 1910.

## Fruit and Vegetables.

Variety.	Quantity.	Price. s. d.
Apple Trees, ...	6	8 0
Black Currants, ...	6	2 0
Gooseberries, ...	6	2 0
Rhubarb, ...	3	2 0
Potatoes, Early, ...	4 st.	4 0
Late, ...	4 st.	4 0
Peas, ...	1 qt.	2 0
Cabbage, Early, ...	1 oz.	0 9
Savoy, ...	1 oz.	0 4
Broccoli, ...	1 oz.	0 6
Brussels Sprouts, ...	1 oz.	0 6
Carrots, ...	1 oz.	0 6
Parsnips, ...	1 oz.	0 6
Onions, Spring, ...	1 oz.	1 0
Autumn, ...	1 oz.	0 8
Leek, ...	1 oz.	0 6
Lettuce, ...	1 oz.	0 6

	Flowers.	Quantity.	Price.
			s. d.
Sweet Pea,	...	1 packet	1 0
Mignonette,	...	1 "	0 3
Candiot,	...	1 "	0 3
Wallflower,	...	1 "	0 3
Nasturtium,	...	1 "	0 3
			£1 10 0
<i>Artificial Manures,</i>			
Sulphate of Potash,	...	3 st.	} 10 0
Nitrate of Soda,	...	3 st.	
Superphosphate,	...	4 st.	
Total,			£2 0 0

## Scheme No. 20

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND,SCHEME FOR ENCOURAGING IMPROVEMENT IN THE DAIRY  
CATTLE OF IRELAND THROUGH THE SELECTION AND  
REGISTRATION OF COWS.

Dairying, as well as the raising of store cattle, is one of the principal branches of agriculture pursued in this country. It is, accordingly, of importance that the milking properties of Irish cattle should be preserved and improved. In dairy herds the yield and quality of milk given by each cow largely determine whether that animal realises a profit or entails a loss to the owner; consequently it is essential that farmers should know exactly the quantity and quality of milk which each cow yields per annum. At the same time, as young cattle are a considerable source of revenue, it is desirable that the good milking cow should be of the type likely to produce a calf which will be of value for both beef and milk. With the object of encouraging the improvement of Irish dairy cattle, the Department have decided to put into operation the following scheme.

1. The Department will keep a register of dairy cattle in which cows and their produce may be entered, subject to the provisions of this scheme. The inspection of cows with a view to entry on this register will be carried out by the Department.

2. Owners of good cross-bred and pure-bred dairy cows are invited to apply on the prescribed form for the inspection of their stock by the Department as regards:—

- (a) General merit (i.e., appearance), and
- (b) Milk yield.

Only cows of a distinct and well-defined type are eligible.

3. Applications for the inspection of cows must be lodged with the Department on the prescribed form on or before the 31st August each year, and must be accompanied by a fee of 2s. 6d. in respect of each cow entered for inspection.

As soon as all applications have been received, the Department will give due notice to each cow owner of the centre fixed for inspection of his animals.

Cow owners presenting animals for inspection will be refunded all fees paid by them except in respect of cows which are provisionally selected for registration under Clause 4.

4. Cows will be provisionally selected, on the ground of general merit, at local shows, local exhibitions, or at such other convenient centres as may be determined by the Department.

With regard to inspections elsewhere than at local shows, it should be understood that the Department, save in exceptional cases, cannot undertake to send an Inspector to any district unless at least ten cows from such district are offered for inspection.

All animals provisionally selected for general merit under this scheme will be suitably marked by the Department for future identification.

#### *Provisionally Selected Cows.*

5. Owners of cows provisionally selected under Clause 4, are required to observe the following conditions:—

- (a) To provide themselves with an approved type of machine for weighing milk;
- (b) To weigh the milk yielded by each cow on every seventh day during the entire milking period (the exact day of the week for each herd will be fixed by the Department), and to record the same on the form provided for the purpose;
- (c) To permit their herds to be inspected by the Department at any time; and,
- (d) To afford the Department every facility for examining the milk records and for taking samples of the milk of each selected animal.

6. The records kept under Clause 5 (b) shall be forwarded to the Department when required. This will, usually, be at the end of the year following that in which the cows were provisionally selected.

7. As soon as possible after the receipt of these records, the Department will notify to each owner of a provisionally selected cow their decision as to the registration or rejection of the animal.

8. If the owner of a provisionally selected cow complies with the requirements of Clause 9, and if the cow is subsequently accepted for entry in the Department's Register, particulars of the progeny with regard to which the necessary certificates have been furnished prior to the registration of the dam, will be duly recorded in the Register, and such progeny will be entitled to the same benefits as if calved after the registration of the dam.

#### *Registered Cows.*

9. The owner of each registered cow must comply with the following conditions:—

- (a) To have the animal served by a registered dairy bull or a pure-bred bull of her own type. These bulls must be passed by the Department as eligible for a premium:  
[Persons who intend eventually to enter the progeny of registered cows in the herds of their respective breeds must have the cows served by pure-bred bulls. N.B.—A registered dairy bull may be pure-bred.]
- (b) To forward on the prescribed form a certificate of service to the Department within three months from the date of such service;
- (c) To furnish to the Department on the prescribed form, within seven days from the date of birth, particulars regarding sex, colour, markings, &c., of each calf produced by a registered cow; and,
- (d) To keep on the prescribed form a record of the breeding, date of birth, &c., of produce, for the purposes of future registration.

10. The female progeny from the service of registered cows by approved pure-bred bulls will be eligible for inspection at or about two years old, at a fee of 2s. 6d. each.

11. When a registered cow or her calf has been disposed of, the Department must be notified of the fact within fourteen days of the disposal of the animal, and at the same time advised of the name and address of the new owner.

The death of a registered cow or her calf must also be notified to the Department within fourteen days of the death of the animal.

12. In all cases of dispute in matters connected with this scheme the decision of the Department shall be final.

March, 1910.

#### SCHEME No. 22.

### DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND.

#### VETERINARY DISPENSARIES IN CONGESTED DISTRICTS.

1. The Department will establish a limited number of Veterinary Dispensaries in the poorer parts of the more congested counties. For this purpose they propose to subsidise a number of Veterinary Surgeons whose headquarters are within reasonable distance of the districts to be benefited.

2. In fixing the subsidy to be paid Veterinary Surgeons for their services the Department will take into consideration the poverty of the district, the difficulties of travelling, and whether the district is or is not regularly visited by the Veterinary Surgeon in the ordinary course of his practice.

3. Subsidised Veterinary Surgeons will be required to give advice to all *bona fide* farmers under £10 valuation and resident in congested districts who seek it either at a dispensary or at the Veterinary Surgeon's headquarters.

4. The term "*bona fide* farmer" is to be understood to mean a person who derives his means of living mainly from the cultivation of his holding. Each applicant must, if requested to do so, produce evidence that his total valuation does not exceed £10.

5. Subsidised Veterinary Surgeons will be required to attend at certain centres at least fortnightly, or as may be arranged, on days and at hours fixed by the Department, and advertised by them in the district.

6. Subsidised Veterinary Surgeons must also attend when required at the residence of farmers entitled to the benefits of this scheme.

7. The following scale of fees will apply:—

Advice at headquarters or dispensary, 1/- per case.

Simple operations at headquarters or dispensary, 1/- per case.

Severe operations at headquarters or dispensary, 2/6 per case for persons whose valuation is £5 or under, and 5/- per case for persons whose valuation exceeds £5 but does not exceed £10.

Inoculation at headquarters or dispensary, 1/- per case.

Attendance at farmer's residence, 1/- per £ of valuation, provided the minimum fee is not less than 2/6.

Double fees may be charged after sunset.

8. Medicines supplied by the Veterinary Surgeon to persons entitled to the benefits of this scheme shall be charged for in addition at reasonable prices.

9. Subsidised Veterinary Surgeons will be required to keep at their headquarters and at each dispensary a record of the number and the nature of the cases treated under this scheme, the fees charged therefor, and the amount charged for any medicines supplied.

10. The Department reserve the right to ask each Veterinary Surgeon subsidised under this scheme to give public lectures on veterinary hygiene at a fee to be arranged.

11. The work of each subsidised officer under this scheme shall be subject to inspection by the Department from time to time.

12. The subsidy will be paid at the end of each quarter.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

REVISED SCHEME OF AGRICULTURAL EXPERIMENTS.

These experiments are intended only for those counties in which an agricultural instructor has been appointed for the purpose of personally attending to all the details of selecting and measuring the land, sowing the seed, applying the manure, weighing the crops, and tabulating and writing a report on the result.

Agricultural instructors should be specially careful not to undertake experiments at too many centres, as the amount of work necessary is much greater than is supposed by those who have no experience of field experiments. Demonstrations with seeds and manures may be undertaken at a much larger number of centres.

Before commencing field experiments and demonstrations, each instructor must submit to the Department his proposals for the year.

In all cases seeds and manures must be ordered by the instructor, and paid for by the County Committee.

As early as possible, after the close of the season, tabulated results of the experiments must be sent to the Department, and where these are presented in a concise form, accompanied by brief and carefully prepared notes, the same may be published by the County Committee, provided the approval of the Department has been previously obtained. All plots should be marked off at the commencement of the experiment by pegs, 3 inches square and 2½ feet long, which should be firmly driven into the ground.

These plots are intended as object lessons to farmers in the cultivation, manuring and seeding of land, and should be labelled so that an ordinary observer may be able easily to ascertain what they are intended to show. One label will suffice for each demonstration plot, but in the case of an experiment which includes several plots, a larger label stating the general character of the experiment should be erected in addition to the smaller labels, giving particulars with respect to each of the plots included in the experiments. The labels should be capable of resisting the weather.

No change must be made in any of the manurial experiments, as given below, but the instructor may include such additional plots as local conditions render advisable. In the variety tests instructors are required to include all the varieties specified in each list.

It is not absolutely necessary to have both a manurial and a variety test with any particular crop. One or other, or both, may be omitted at discretion.

SCHEME OF THE EXPERIMENTS.

All the experiments with the exception of those numbered II., IX., X., XIII., and XVI. (introduced in 1908), have been carried out annually since 1902, some slight modifications having been made in 1906 and 1909.

I.—OAT CROP (Manurial Test. Old Series).

Size of plots, one-tenth of a statute acre

The following kinds and quantities of manure will be used per statute acre :—

No. of Plot.		No. of Plot.	
1.	No manure.	5.	{ 1 cwt. Sulphate of Ammonia.
2.	1 cwt. Sulphate of Ammonia.	3.	{ 3 cwt. Superphosphate.
3.	3 cwt. Superphosphate.	8.	{ 8 cwt. Kainit.
4.	{ 1 cwt. Sulphate of Ammonia.	6.	{ 5 cwt. of mixture of artificials
	{ 3 cwt. Superphosphate.		{ made up in same proportions
			{ as for Plot 5.

## II.—OAT CROP (Manure Test. New Series).

Size of plots, one-tenth of a statute acre.

The following kinds and quantities of manure will be used per statute acre :—

No. of Plot.	No. of Plot.
1. No manure.	4. { 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 2 cwt. Kainit.
2. { 1 cwt. Sulphate of Ammonia. 2 cwt. Superphosphate. 2 cwt. Kainit.	5. { 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 3 cwt. Kainit.
3. { 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 2 cwt. Kainit.	6. { 1 cwt. Sulphate of Ammonia. 3 cwt. Superphosphate. 4 cwt. Kainit.

## III.—OAT CROP (Variety Test).

Size of plots not less than one-eighth or more than a quarter of a statute acre.

The following varieties to be tested :—

No. of Plot.	No. of Plot.
1. Potato.	3. Tartar King.
2. Black Tartarian.	4. Banner.
3. Abundance.	7. Any other variety.
4. Waverley.	

## IV.—BARLEY CROP (Manure Test).

Size of plots, one-tenth of a statute acre.

The kinds and quantities of manure will be the same as for Oats (see above).

## V.—BARLEY CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre

The following varieties to be tested :—

No. of Plot.	No. of Plot.
1. Archer's Chevalier.	3. Any other variety.
2. Goldthorpe.	

## VI.—WHEAT CROP (Variety Test).

Size of plots, not less than one-eighth or more than a quarter of a statute acre.

The following varieties may be tested :—

No. of Plot.	No. of Plot.
1. Red Fife.	4. White Queen.
2. Red Chaff White.	5. Any other variety (preferably Square-head Master).
3. White Stand-up.	

## VII.—TURNIP CROP (Manure Test with Farmyard Manure. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manure will be used per statute acre :—

No. of Plot.	No. of Plot.
1. No manure (size of this plot, one-fortieth of a statute acre).	6. { 10 tons Farmyard Manure. 4 cwt. Superphosphate.
2. 20 tons farmyard manure.	7. { 1 cwt. Sulphate of Ammonia 3 cwt. Kainit.
3. 10 tons farmyard manure.	
4. { 10 tons Farmyard Manure. 4 cwt. Superphosphate.	7. { 10 tons Farmyard Manure. 5 cwt. of mixture of artificials made up in same proportions as for Plot 6.
5. { 10 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.	

## VIII.—TURNIP CROP (Manurial test WITHOUT Farmyard Manure. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.	No. of Plot.
1. No manure (size of this Plot, one-fortieth of a statute acre).	4. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.
2. 4 cwt. Superphosphate.	5. { 3 cwt. Kainit. 6 cwt. Superphosphate.
3. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia.	6. { 1½ cwt. Sulphate of Ammonia. 4 cwt. Kainit.

## IX.—TURNIP CROP (Manurial Test WITH Farmyard Manure. New Series).

Size of plots, one-twentieth of a statute acre.

No. of Plot.	No. of Plot.
1. 10 tons Farmyard Manure.	5. { 10 tons Farmyard Manure. 4 cwt. Basic Slag.
2. { 10 tons Farmyard Manure. 4 cwt. Superphosphate.	6. { 10 tons Farmyard Manure. 5 cwt. Basic Slag.
3. { 10 tons Farmyard Manure. 5 cwt. Superphosphate.	7. { 10 tons Farmyard Manure. 6 cwt. Basic Slag.
4. { 10 tons Farmyard Manure. 6 cwt. Superphosphate.	

## X.—TURNIP CROP (Manurial Test WITHOUT Farmyard Manure. New Series).

Size of plots, one-twentieth of a statute acre.

No. of Plot.	No. of Plot.
1. { 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	4. { 4 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
2. { 5 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	5. { 5 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.
3. { 6 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.	6. { 6 cwt. Basic Slag. 1 cwt. Sulphate of Ammonia. 3 cwt. Kainit.

## XI.—TURNIP CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested :—

## SWEDES.

No. of Plot.	No. of Plot.
1. Improved Purple Top.	5. Elephant.
2. Best of all.	6. Stirling Castle.
3. Magnum Bonum.	7. Incomparable Green top (Garten).
4. Triumph.	8. Any other variety.

## YELLOW TURNIPS.

9. Centenary.	11. Any other variety.
10. Aberdeen Green top.	

## XII.—MANGEL CROP (Manurial Test. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

No. of Plot.	No. of Plot.
1. No manure (size of this plot, one-fortieth of a statute acre).	5. { 20 tons Farmyard Manure. 4 cwt. Superphosphate.
2. 20 tons Farmyard Manure.	6. { 2 cwt. Sulphate of Ammonia. 4 cwt. Kainit.
3. { 20 tons Farmyard Manure. 4 cwt. Superphosphate.	7. { 20 tons Farmyard Manure. 4 cwt. Superphosphate.
4. { 20 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia.	8. { 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.

7. { 20 tons Farmyard Manure.  
4 cwt. Superphosphate.  
4 cwt. Salt.  
2 cwt. Nitrate of Soda (to be applied after thinning in two dressings).

## XIII.—MANGEL CROP (Manurial Test. New Series).

Size of plots, one-twentieth of a statute acre.

No. or Plot.		No. or Plot.	
1.	20 tons Farmyard Manure.	5.	20 tons Farmyard Manure.
2.	{ 20 tons Farmyard Manure. 2 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.	6.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 3 cwt. Sulphate of Ammonia. 4 cwt. Salt.
3.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia 4 cwt. Salt.	7.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 2 cwt. Salt.
4.	{ 20 tons Farmyard Manure. 5 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 4 cwt. Salt.		
8.	{ 20 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 6 cwt. Salt.		

## XIV.—MANGEL CROP (Variety Test).

Size of plots, each four ridges full length of field.

The following varieties to be tested:—

No. or Plot.	No. or Plot.
1. Yellow Globe.	4. Long Red.
2. Prize Winner.	5. Any other variety.
3. Golden Tankard.	

## XV.—POTATO CROP (Manurial Test. Old Series).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre:—

No. or Plot.		No. or Plot.	
1.	No manure (size of this plot, one-fortieth of a statute acre).	6.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 1 cwt. Muriate of Potash.
2.	20 tons Farmyard Manure.	7.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate. 1 cwt. Sulphate of Potash.
3.	15 tons Farmyard Manure.		
4.	{ 5 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia.		
5.	{ 15 tons Farmyard Manure. 1 cwt. Sulphate of Ammonia. 4 cwt. Superphosphate.		

## XVI.—POTATO CROP (Manurial Test. New Series).

Size of plots, one-twentieth of a statute acre.

No. or Plot.		No. or Plot.	
1.	15 tons Farmyard Manure.	5.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 1½ cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.
2.	{ 15 tons Farmyard Manure. 3 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.	6.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 2 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.
3.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia 1 cwt. Muriate of Potash.	7.	{ 15 tons Farmyard Manure. 4 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1½ cwt. Muriate of Potash.
4.	{ 15 tons Farmyard Manure. 5 cwt. Superphosphate. 1 cwt. Sulphate of Ammonia. 1 cwt. Muriate of Potash.		



3. { 15 tons Farmyard Manure.  
4 cwt. Superphosphate.  
1 cwt. Sulphate of Ammonia.  
2 cwt. Muriate of Potash.

## XVII.—POTATO CROP (Variety Test).

Size of plots, one-twentieth of a statute acre.

The following varieties to be tested :—

- | <i>Maincrop.</i>        | <i>Mid-Season.</i>     |
|-------------------------|------------------------|
| No. or Plot.            | No. or Plot.           |
| 1. Up-to-date.          | 9. British Queen.      |
| 2. Duchess of Cornwall. | 10. Abundance.         |
| 3. Fector.              | 11. Any other variety. |
| 4. Irish Queen.         |                        |
| 5. Shamrock.            |                        |
| 6. Black Skerries.      |                        |
| 7. Old Champion.        |                        |
| 8. Any other variety.   |                        |

## XVIII.—POTATO CROP (Boxing Test).

Size of plots, one twentieth of a statute acre.

- No. or Plot.
1. "Seed" boxed before December 1st.
  2. Seed boxed after January 1st.
  3. Unsprouted seed.

## XIX.—POTATO CROP (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following will be compared :—

(120 gallons of mixture to be applied per statute acre at each spraying).

- No. or Plot.
1. Unsprayed.
  2. Effect of a 1 per cent. lime or Bordeaux mixture, double application.
  3. Effect of a 2 per cent. lime or Bordeaux mixture, single application.
  4. Effect of a 2 per cent. lime or Bordeaux mixture, double application.
  5. Effect of a 1 per cent. soda or Burgundy mixture, double application.
  6. Effect of a 2 per cent. soda or Burgundy mixture, single application.
  7. Effect of a 2 per cent. soda or Burgundy mixture, double application.

## XX.—DESTRUCTION OF CHARLOCK (PRESHAUGH) AND OTHER WEEDS. (Spraying Test).

Size of plots, one-tenth of a statute acre.

The following solutions will be tested :—

- No. or Plot.
1. Unsprayed.
  2. 50 gallons 3 per cent. Sulphate of Copper.
  3. 50 gallons 4 per cent. Sulphate of Copper.

## XXI.—MEADOW HAY CROP (Manurial Test for one year).

Size of plots, one-twentieth of a statute acre.

The following kinds and quantities of manures will be used per statute acre :—

- | No. or Plot.                 | No. or Plot.                          |
|------------------------------|---------------------------------------|
| 1. No manure.                | 5. { 1 cwt. Nitrate of Soda.          |
| 2. 10 tons Farmyard Manure.  | 2 cwt. Superphosphate.                |
| 3. 1 cwt. Nitrate of Soda.   | 2 cwt. Kainit.                        |
| 4. { 1 cwt. Nitrate of Soda. | 1 cwt. Nitrate of Soda.               |
| 2 cwt. Superphosphate.       | 2 cwt. Superphosphate.                |
|                              | 6. { 2 cwt. Kainit (applied not later |
|                              | than Nov. 30th).                      |

## XXII.—IMPROVEMENT OF SECOND CLASS PASTURE.

*Improvement to be estimated by Observation.*

Size of plots, one-quarter of a statute acre.

The following kinds and quantities of manures may be used per statute acre :—

No. or Plot.	No. or Plot.
1. 5 cwt. Basic Slag.	4. 10 cwt. Basic Slag.
2. 5 cwt. Basic Slag.	5. 2 cwt. Kainit.
3. 2 cwt. Kainit.	6. 5 cwt. Potassic Superphosphate
3. 10 cwt. Basic Slag.	6. 10 cwt. Potassic Superphosphate

## XXIII.—INFLUENCE OF SEED MIXTURES IN FORMING PASTURE.

*Land selected to be left in grass for not less than two years.*

Size of plots, one-tenth of a statute acre.

The following mixtures may be tested :—

*Plot 1.*

- 1 bushel Italian Rye Grass (22 lb. the bushel).
- $\frac{1}{2}$  bushel Perennial Rye Grass (28 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 2.*

- 1 bushel Perennial Rye Grass (28 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 3.*

- 1 bushel Meadow Fescue (29 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 4 lb. Red Clover.
- 2 lb. White Clover.

*Plot 4.*

- $\frac{1}{2}$  bushel Perennial Rye Grass (28 lb. the bushel).
- $\frac{1}{2}$  bushel Italian Rye Grass (22 lb. the bushel).
- 3 lb. Cocksfoot.
- 3 lb. Timothy.
- 3 lb. Meadow Fescue.
- 3 lb. Red Clover.
- 2 lb. Alsike Clover.
- 2 lb. White Clover.

[N.B.—It should be carefully noted that the Superphosphate, Basic Slag, Sulphate of Potash, and Muriate of Potash used in these experiments must be High Grade. Low Grade Manures should not be used].

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION STREET, DUBLIN,  
December, 1909.

No. 23263/00.

*Weeds and Agricultural Seeds (Ireland) Act, 1909.*

SIR,—I have to inform you that the above Act, which has just been passed, will come into force on 1st January, 1910. The Department desire to bring under the notice of all persons engaged in the sale of agricultural seeds in Ireland the main provisions of the Act so far as they relate to such seeds.

The object of Part II. of the Act briefly is to enable the Department to exercise over the trade in agricultural seeds a supervision similar to that exercised by them in the case of artificial manures and cattle foods under the Fertilisers and Feeding Stuffs Act, 1906.

It is as essential for the proper cultivation of crops that pure seeds and seeds of high germination should be obtainable as that good manures should be used. The Department are, however, aware that in some districts large quantities of seeds of very inferior quality are being sold. In many cases the sweepings of hay lofts, containing the seeds of weeds, are sold as grass seeds. In other cases old seeds, seeds that have been badly saved or are otherwise defective, are purchased and resold because of their apparent cheapness by local shopkeepers who, in most cases, do not realise that this course inflicts a grievous injury upon the agriculture of the district. The injury comes not only through the loss of crop, but, by reason of the impurities contained in the seed, the prevalence of weeds amongst the crops is greatly increased.

The Act has, therefore, been passed with a view to putting a check on the use of seed of this description. The undermentioned Sections which apply specially to seeds are quoted in full for the information of those concerned in the trade:—

*Section 5 (1).* Any officer of the Department shall have power at all reasonable hours to enter the shop, store, or other premises of any person who sells or exposes or keeps for sale agricultural seeds for sowing, and to examine and take samples of any agricultural seeds that are upon the premises.

(2). The person on whose premises a sample of agricultural seeds is taken under this Section shall, if the officer requires, give the name and address of the person from whom he procured the seeds; and if he refuses to give such name and address, or wilfully gives a false name or address, he shall be guilty of an offence under this Act, and shall be liable on summary conviction to a penalty not exceeding Ten Pounds.

*Section 6.* The Department may cause any sample of agricultural seeds taken under this Act to be tested for purity and germination, and may publish in such manner as they think fit the results of the tests and the names and addresses of the persons upon whose premises the samples were taken, and of the persons from whom the seeds were stated to have been procured.

In Part III. of the Act "agricultural seeds" are defined as meaning the seeds of grass, clover, flax, cereals, turnips, rape, mangold, carrots, cabbage, or parsnaps.

The seeds of all grasses that may be sold for agricultural purposes are covered by the Act. There are, however, only seven grasses that need concern the agriculturist, viz.: Perennial Rye, Italian Rye, Cocksfoot, Timothy, Meadow Fescue, Meadow Fertil, and in special cases Crested Dogtail. The Department do not recommend the use of any others, and, accordingly, they propose to confine their attention to this series almost exclusively. Shopkeepers would do well to stock no others. The use of each variety is described in leaflet No. 42, of which a copy is enclosed.

As already stated, the Act will come into operation on the 1st January next, after which date the Department's agricultural officers will be instructed to take samples of seeds which will be tested at the Department's Seed Testing Station with a view to ascertaining, for publication if thought desirable, the quality and source of the seeds sold locally. It, therefore, behoves all engaged in the retail of seeds for sowing to give special attention in future to this side of their business.

Merchants, shopkeepers and others will be buying their stock of seeds for the ensuing season very shortly, and the Department would strongly impress upon them the need for ensuring that they purchase none but the best. They should get a guarantee from the wholesale firm of seedsmen with whom they deal that the seeds are fresh, pure, true to name, and of a high germinating power. The Department do not intend to administer this measure in any harsh spirit, but if the above advice is disregarded shopkeepers and others can have no cause for complaint if the powers conferred upon the Department under the Act are exercised to the fullest extent.

It should be to the interest of those engaged in the seed trade, as well as of farmers, to place and maintain the trade in this country on a high

level in every respect, and the Department feel confident that in their efforts to secure this very desirable result they may rely upon the active co-operation of all vendors of agricultural seeds.

As mentioned above, a good deal of the harm is due to want of technical knowledge of seeds and their properties. With a view to assisting those engaged in the trade to improve their knowledge in this respect, the Department hope at a future period to make provision, if there is a sufficient demand for it, for some local technical instruction on this subject for traders and their apprentices. A communication will be made on this subject at a later date.

I am,

Sir,

Your obedient Servant,

T. P. GILL,

Secretary.

To the Person or Firm  
named in the Address.

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DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN,  
10th December, 1909.

No. 24888/109.

*Weeds and Agricultural Seeds (Ireland) Act, 1909.*

SIR,—The Department invite the attention of your Council to the main provisions of the above Act (copy enclosed) which will come into operation on the 1st January next, in so far as they relate to the prevention of the spread of noxious weeds in this country.

There are, of course, numerous weeds not specified in the Act which might with advantage have been included in a measure of this kind, but it will be admitted that the five mentioned, viz., Ragwort, Charlock, Coltsfoot, Thistle, and Dock, are among the most troublesome with which Irish farmers have to contend.

It is hardly necessary to point out to the Council the incalculable harm which these weeds, unfortunately so prevalent in Ireland, do to agriculture both by robbing the soil of its valuable plant food and by crowding out and causing the deterioration of the cultivated plants. Their prevalence further increases the cost of every farm operation, ploughing, harrowing, seeding, weeding, cultivating, and harvesting, as well as the cost of cleaning the seed of the crops among which they grow.

In many districts systematic efforts are made by careful farmers to eradicate the weeds of this nature from their land, but their efforts are often to a great extent nullified by the negligence of their neighbours who permit such weeds to grow unchecked on their farms. The seeds from these plants are conveyed by the wind and other means to the adjoining lands, and hence the good work of the first-mentioned class of farmers is frequently undone, and they are discouraged from continuing their commendable efforts to deal with the weed difficulty.

This Act is, therefore, intended to be used as a means for securing that efforts shall be made by all classes to clear the weeds specified from their lands, for their own sakes as well as for the sake of their neighbours.

The main provisions of the Act in so far as they relate to measures for the prevention of the spread of Noxious Weeds are as follows:—

*Section 1* (1). The Department of Agriculture and Technical Instruction may, with the consent of the Council of any County, make an Order declaring that throughout the county all plants of any species to which this section applies are noxious weeds for the purposes of this Part of the Act.

(2). The species of plants to which this section applies are Ragwort, Charlock, Coltsfoot, Thistle and Dock, and the Order may include all or any of those species.

(3). The consent of the County Council shall be signified by a resolution passed at a meeting of the Council, and a copy of the resolution under the seal of the Council shall be accepted as sufficient evidence of such consent.

(4). The Department may, and at the request of the County Council shall, revoke or alter any order made under this section.

The subsequent sections of this Part of the Act provide for the service by the Department upon the occupiers of lands on which the specified weeds are found to be growing of Notices requiring the destruction of the weeds and prescribe penalties for failure to comply with the requirements of such Notices.

As will be seen from Section 1 (1) of the Act, the consent of the Council of each county is required before the Department can make an order declaring the above-mentioned weeds to be noxious weeds for the purposes of the Act, and can take steps for their eradication in the county.

I have to add that it is provided that the work of inspection, service of necessary notices, etc., shall be done by officers of the Department, so that the administration of this measure will not impose any additional charges upon the rates of the county.

I have, therefore, to express the hope that your County Council will pass a resolution signifying their consent to the making of an order declaring that throughout the county all the above-mentioned plants are noxious weeds within the meaning of the Act.

I have to request that you will be good enough to transmit to these offices in due course a sealed copy of the resolution, if any, adopted by your Council in pursuance of Section 1 of the Act.

I am,

Sir,

Your obedient Servant,

T. P. GILL,

Secretary.

The Secretary  
of each County Council.

#### WEEDS AND AGRICULTURAL SEEDS (IRELAND) ACT, 1909

SCHEDULE of Counties in which Noxious Weeds Orders have been made under the Act, and of the plants which have been specified as noxious weeds in each case.

Counties.	Weeds Specified.
Antrim, ... ..	Ragwort, charlock, coltsfoot, thistle, dock.
Armagh, ... ..	Ragwort, thistle, dock.
Down, ... ..	Charlock, coltsfoot, thistle, dock.
Dublin, ... ..	Ragwort, coltsfoot, thistle, dock.
Fermanagh, ... ..	Ragwort, charlock, coltsfoot, thistle, dock.
Kerry, ... ..	Ditto.
Kildare, ... ..	Ragwort, coltsfoot, thistle, dock.
Kilkenny, ... ..	Thistle.
Limerick, ... ..	Ragwort, charlock, coltsfoot, thistle, dock.
Londonderry, ... ..	Thistle, dock.
Meath, ... ..	Ragwort, charlock, coltsfoot, thistle, dock.
Monaghan, ... ..	Ditto.
Queen's, ... ..	Ragwort, coltsfoot, thistle, dock.
Roscommon, ... ..	Ragwort, charlock, coltsfoot, thistle, dock.
Tipperary S.R., ... ..	Ditto.
Westmeath, ... ..	Ditto.

*Circular letter to Trade Associations and other bodies connected with the  
Irish Butter Trade in Great Britain.*

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN,

April, 1910.

No. 9029-10.

*Departmental Committee on the Irish Butter Industry.*

Sir,—I am desired by the Vice-President to transmit, for the information of the Association, a copy of the recently published Report of the Departmental Committee on the Irish Butter Industry.

As the Report deals with matters of the greatest importance to the butter trade, the Department express the hope that it will receive the full and careful consideration of your Association. With this view the Department will be much obliged if you will be so good as to bring the Report before a meeting of your Association at an early date, and to draw their attention particularly to the conclusions of the Committee as set forth in "Part I.—Trade Descriptions."

The Department, moreover, trust that they will have the active support of your Association and that of similar bodies throughout the United Kingdom in stamping out the abuses referred to in Part I. of the Report. It is suggested that your Association could at present afford very great assistance in this matter by issuing a circular to each of its members asking them to avoid and to discourage in every way the use, as designations of the different classes of Irish Butter, of any variations on the four names:—"Creamery Butter," "Dairy Butter," "Factory Butter," and "Dairy Separator Butter," inasmuch as the numerous variations on these terms, which have been introduced in connection with the trade in Irish butters, are not only now unnecessary, but are in fact the cause of great injury to the reputation of all classes of Irish butter owing to the confusion and suspicion resulting from their use. Copies (a further supply of which may be obtained on application) of extracts from the Report containing the definitions of the four above-mentioned names are sent herewith. These might, perhaps, usefully be enclosed with any circulars on the subject which your Association may be good enough to issue.

I am to add that the Department will be interested to learn of any action which your Association may take as a result of this communication.

I am,

Sir,

Your obedient Servant,

T. P. GILL,  
Secretary.

The Secretary,

(NOTE.—A somewhat similar communication was issued to Butter Manufacturers and others in Ireland.)

#### DEPARTMENTAL COMMITTEE ON THE IRISH BUTTER INDUSTRY

##### EXTRACTS FROM THE REPORT OF THE COMMITTEE

###### Paragraph 17.

The principal descriptions at present applied to Irish butter are names which simply indicate the class of premises in which the butter is manufactured. In Ireland butter is manufactured in three kinds of premises, namely, "creameries," "dairies" and "butter factories," and there are

thus three classes of butter, "creamery butter," "dairy butter" and "factory butter." We find as the result of our inquiry, that of the large number of designations brought to our notice these are the three well established names under which all Irish butter is classified by the existing custom and usage of the trade.

*Paragraph 62.*

2. The term "creamery butter," according to the custom of the trade, means unblended butter made from cream separated by centrifugal force from the commingled milk supplies of a number of cowkeepers, in premises adapted and utilised for the manufacture of butter in commercial quantities.

3. The term "dairy butter," as understood in the trade, means butter made at the farmer's homestead, whether from whole milk, hand-skimmed cream, or cream extracted from the milk by means of a separator.

4. The term "factory butter," as understood in the trade, means any butter blended, re-worked, or subjected to any other treatment, but not so as to cease to be butter.

5. Butter made at the farmer's homestead from cream extracted from the milk by means of a separator is properly described as "dairy separator butter."

6. Steps should be taken to prevent the use for dairy butter and for factory butter of names which are suggestive of the term "creamery."

7. The Department of Agriculture and Technical Instruction for Ireland should take special steps by bringing our findings, as set forth in Part I., before all those engaged in the industry, to secure the co-operation of the principal trade associations, and other bodies, as well as of individual members of the trade, in stamping out the abuses which have arisen from the application of misleading or ambiguous names to Irish butter.

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DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION  
FOR IRELAND.

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ANALYSES OF IRISH BUTTER.

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As suspicion had more than once been cast upon consignments of Irish butter and cream, which afterwards proved to have been perfectly genuine, the Department of Agriculture and Technical Instruction for Ireland ordered an investigation to be made into the Reichert-Wollny standard and its application to Irish butter.

During a period extending from February, 1908, to March, 1909, samples of butter and cream were obtained from certain selected creameries and forwarded for analysis to the Albert Agricultural College, Glasnevin. The samples were taken by the Department's Dairy Inspectors, and as the butters were made under the personal supervision of these officers, their genuineness cannot be questioned. Where the cream had not been made into butter a sample of the cream itself was taken and churned in the sample bottle. In the course of the investigations about 300 samples were obtained from eight creameries. These samples represented the produce of about 8,000 cows, giving an annual output of about 800 tons of butter. The method of analysis adopted was identical with that recommended by the Committee on Butter Regulations, 1903.

The results show that 16.2 per cent. of the samples gave a Reichert-Wollny number below 24, the limit suggested by the Butter Regulations Committee for pure butter.

The samples giving figures below 24 were all taken during one particular period, November to January, the lowest figure obtained; viz., 20.1. occurring in both December and January.

It is, therefore, evident that no analyst is justified in condemning a sample of butter, Irish or other, as adulterated merely on account of its giving a low Reichert-Wollay number, particularly as there is no evidence whatever to show that such butter is necessarily of low quality, however the term "quality" may be defined.

All the samples of butter for the above investigation were tested for water. The average percentage for 137 samples was found to be 13.04, the highest being 16.0 and the lowest 9.65.

*Circular letter to Proprietors of Cheese Factories in Ireland.*

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN,  
June, 1910.

No. 11060/10.

GENTLEMEN,—The Department desire to draw the attention of proprietors of cheese factories in Ireland to a practice which is the cause of much detriment to the reputation of Irish cheese in the British markets. It would appear that several manufacturers of Cheddar cheese in Ireland have adopted the practice of making cheese from a mixture consisting of whole milk and separated milk in varied proportions, the proportion of separated milk sometimes amounting to 50 per cent. of the mixture.

At the present time with improved methods a considerable development might reasonably be expected in the Irish cheese-making industry. If, however, practices such as that mentioned are followed, the Department are satisfied that the industry will not yield to the makers a sufficient profit to encourage any appreciable development. On the contrary, the lowering of the quality and price of Irish cheese, which has taken place as a result of the practice referred to, has brought discredit on Irish cheese and has greatly discouraged its manufacture. In the case of cheese, as of other Irish products, the best and most remunerative markets are only to be secured by establishing a high reputation for the commodity, and by producing it under conditions which will compare favourably with those obtaining in other countries. The Department, therefore, view with apprehension the introduction of a system of manufacture which is likely to give rise to the impression among buyers in Great Britain that Irish cheese is made from impoverished or adulterated materials. They feel that the unfavourable reputation which is thus being established for the Irish product will continue to depress its market value. Under improved methods, the intrinsic merits of Irish cheese as a whole may be made equal or superior to those of cheese made in other countries. The Department are prepared, in so far as is practicable, to assist cheese-makers in Ireland, provided that an assurance is given that none but whole milk will be used in the process.

In regard to the legal aspect of the sale of cheese made from impoverished or adulterated milk, the Department desire to point out that any person selling such cheese under the name of "Cheddar Cheese" may render himself liable to be proceeded against for an offence under The Sale of Food and Drugs Act, 1875, and also under the Merchandise Marks Act.

I am,

Gentlemen,

Your obedient Servant,

T. P. GILL,  
Secretary.

To the Proprietors of Cheese Factories  
in Ireland.



*Circular to the Proprietors of certain Creameries in Ireland which have been Registered as Butter Factories.*

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION STREET, DUBLIN.

July, 1910.

No. 19309/10.

GENTLEMEN,—I have to acquaint you as proprietors of the creamery at that, from the information supplied to the Department, it would appear that the creamery in question has been registered with the Local Authority in the manner prescribed for premises used for purposes necessitating such registration under the Sale of Food and Drugs Acts. I have, accordingly, to state that, inasmuch as, by reason of their utilisation in the manner referred to, the premises cease to comply with the definition of a creamery as set forth in Clause 1 (a) of the Department's Scheme (No. 15) for encouraging improvement in the management of creameries, the Department cannot retain the creamery in question on the list of those participating in the operations of their Scheme unless they are satisfied that such action as may be necessary will be taken by you to have the afore-mentioned registration duly cancelled.

It may be well to point out that the obligation as to registration under the Sale of Food and Drugs Acts does not extend to premises which are used solely for the manufacture of creamery butter. Registration is, however, required if such premises are also used for one or more of the following purposes:—

1. As a manufactory of margarine or margarine cheese.
2. As a butter factory, that is to say, any premises on which by way of trade butter is blended, re-worked, or subjected to any other treatment, but not so as to cease to be butter.
3. As premises on which there is manufactured milk-blended butter (that is to say, any mixture produced by mixing or blending butter with milk or cream other than condensed milk or cream), or as premises on which there is carried on the business of a wholesale dealer in milk-blended butter or margarine.

The use of the same premises at the same time for the manufacture of creamery butter, and for the blending or re-working of butter, or the manufacture of milk-blended butter is, for obvious reasons, open to serious objection. In this connection I have to refer to paragraph 31 of the Report of the Departmental Committee on the Irish Butter Industry, a copy of which has already been transmitted to you.

I have to add, that in the event of your intending, in the foregoing circumstances, to obtain cancellation of the registration of the creamery in question under the Sale of Food and Drugs Acts, the Department will be glad to be so informed in order that the creamery may be retained on the list of those participating in the operations of Scheme No. 15. Unless, however, action is taken by you in this matter within a reasonable period from the date of this letter, the creamery may be removed from the list in question without further notice.

I am,  
Gentlemen,  
Your obedient Servant,  
T. P. GILL,  
Secretary.

To the Proprietors of the Creamery  
named in the Address.

# TECHNICAL INSTRUCTION.

## PROGRAMME OF EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY FOR DAY SECONDARY SCHOOLS.

### I

#### EXPLANATORY CIRCULAR TO MANAGERS AND PRINCIPALS

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

May, 1910.

SIR, OR MADAM,

The Regulations for the teaching of Experimental Science, Drawing, Manual Instruction, and Domestic Economy in Day Secondary Schools, which were in operation during the academic year 1909-10, will continue in force, without alteration, during the year 1910-11.

The Syllabuses of the courses of instruction, as well as the Prefatory Note to the Syllabuses in Experimental Science, may be obtained separately for general distribution among teachers.

The Department have observed that it has been a practice in some schools to allow students under twelve years of age to attend instruction in the First Year Syllabuses of the Preliminary Course. Such students have then, in the following Session, been permitted to enter the classes following the Second Year Syllabuses, and grants have been claimed upon the instruction afforded at the rates appropriate to the Second Year. The Department are of opinion that, as a rule, students under twelve years of age are not capable of taking full advantage of instruction in the First Year Syllabuses, and they will therefore require that students attending classes in the First Year Syllabuses, before completing their twelfth year, shall repeat those Syllabuses before proceeding to the Course for the Second Year.

In regard to the cases of pupils who may, under Regulation II. 6, be working a second time through any Syllabus of the Programme, attention is directed to the fact that pupils who are capable of profiting by promotion to a higher course should not be permitted to repeat the previous year's course. The Department will withhold grants in respect of instruction given to pupils who may repeat the course of any year if, in the opinion of the Inspector, those pupils had made such progress as would enable them to take, with advantage, the work prescribed for the subsequent year, and in no case will pupils who were presented to the Department's Inspectors for the practical test for Honours candidates, in connection with the examinations of the Intermediate Education Board for Ireland, be accepted for grants on account of a repetition of the same course. As soon as the Managers have decided on the arrangements to be made for the classes to be held during the session, the names of all pupils who propose to work a second time through one of the Syllabuses of the Programme should be notified to these Offices on Form S. 256, in order that the Department's decision in regard to the payment or otherwise of grants in each case may be issued to the Managers at the beginning of the school session.

The efficiency of the instruction will, as hitherto, be tested by inspection, as a rule, without notice. During the latter part of the school session, however, notice will be given of a visit of Special Inspection for that session. At all visits it will be within the discretion of the Inspector to test any or all of the classes by practical exercises in the laboratory, or by viva voce examination of classes or of individuals, or by written examinations, or by a combination of these methods. It should be observed that the rates of payment may be increased by one-tenth or reduced by one or more tenths,

as the Department, on consideration of the Inspector's report, may determine. Reduction by more tenths than one will be exceptional. In cases in which such exceptional treatment is necessary, the Department will in all probability adopt the alternative of giving a reasonable warning, and, unless marked improvement follows, will remove such a school from the list of those aided by the system of grants.

The qualifications required of teachers are set out in Circulars 16, 23, 24, and 25. The Department reserve the right to withdraw recognition of a teacher's qualifications should circumstances occur to render such a course desirable.

Summer Courses for Teachers will be continued as heretofore, but it is hoped that they will shortly have satisfied the need of qualifying teachers, and will develop into "Post Graduate" Courses on special subjects for those already qualified.

The details of the arrangements by which schools and pupils may obtain recognition under the regulations of the Intermediate Education Board for proficiency in Experimental Science, Drawing, and Domestic Economy, as well as the conditions required for a Pass in these subjects, are published in the Rules of that Board.

I am,  
Sir, or Madam,  
Your obedient Servant,  
T. P. GILL,  
*Secretary.*

## II.

### REGULATIONS FOR THE ADMINISTRATION AND DISTRIBUTION OF GRANTS FOR EXPERIMENTAL SCIENCE, DRAWING, MANUAL INSTRUCTION, AND DOMESTIC ECONOMY IN DAY SECONDARY SCHOOLS IN IRELAND.

#### I. SUBJECTS.

1. **EXPERIMENTAL SCIENCE** shall mean such a system of instruction in Physical and Natural Science as will involve the greater part of the work being done by the pupils themselves in an approved laboratory.

2. **DRAWING** shall mean a system of instruction in Freehand, Object, Model, and Geometrical Drawing, and Modelling.

3. **MANUAL INSTRUCTION** shall include instruction in the use of tools employed in Wood or Metal-working, and drawing in connection therewith.

4. **DOMESTIC ECONOMY** shall include Cookery and Home-sewing, and may include Laundry-work or any other form of practical instruction in household management of which the Department may approve.

5. No scheme will be approved unless the Department are satisfied that due provision is made for the instruction of the pupils in the other main branches of a general education.

#### II. GRANTS.

Grants in respect of courses of instruction in Experimental Science, Drawing, Manual Instruction, and Domestic Economy, may be made, in accordance with the following regulations, to Day Secondary Schools in which sufficient provision is made for instruction in the other main branches of a general education:—

1. Grants shall be payable in respect of attendances made by those students only who are twelve years of age on or before the 31st day of May in the calendar year in which the course is entered upon, and who have completed an education which would entitle them to be placed in the Sixth Class of a school under the Board of National Education in Ireland. Pupils on the roll of a National School are not eligible for attendance grants.

2. Grants shall be payable in respect of attendances made by the pupils of these schools only which have been approved by the Department.

3. Grants on the average attendance of duly qualified pupils will be made for each hour of instruction per week throughout the school year, according to the following scale:—

**EXPERIMENTAL SCIENCE.**—10s. for the first year of the course; 12s. 6d. for the second year of the course; 15s. for the third year of the course; and 20s. for the fourth year of the course.

**DOMESTIC ECONOMY (as a Special Course).**—8s. for the third or fourth years of the course.

**DRAWING.**—5s. for the first year of the course; 6s. for the second year of the course; 7s. for the third or fourth years of the course.

**MANUAL INSTRUCTION AND DOMESTIC ECONOMY (Auxiliary Courses).**—6s. for the first year of the course; 7s. for the second year of the course; 8s. for the third or fourth years of the course.

4. The numbers on which grants for each subject are to be calculated, at the foregoing rates, shall be determined by adding together the total number of hours of attendance made by all the pupils in that subject (at the approved time-table hours), and dividing by forty, the normal school year being regarded as of forty weeks.

5. The syllabuses of instruction, "first year" and "second year" of the Preliminary, and "third year" and "fourth year" of the Special Courses, correspond with the "first year," "second year," etc., rates of payment.

6. Grants will be payable in respect of the attendances of any one pupil for not more than two years in the Syllabus of the First or Second Year of the Preliminary Course, or of the Third Year of any Special Course, and for not more than one year in the Syllabus of the Fourth Year of any Special Course. Payments will not be made in respect of any one pupil for more than five years in all. It is not obligatory that the claims should be made in consecutive academic years.

7. Grants will be payable in respect of the attendances of any one the Department's Inspectors as well as to attend the Courses in which they have been receiving instruction.

### III. CONDITIONS OF GRANTS.

1. The courses of instruction should begin in August or September of any year and must be continuous throughout the school year. The hours per week devoted to the course must be fairly distributed throughout the week. In exceptional circumstances, where previous application has been made, the Department may sanction another arrangement. Deviations from the approved time-tables, unless previously sanctioned, will be regarded as a serious irregularity.

2. Claims for attendance grants may be preferred on behalf of those students only who have punctually and regularly attended instruction in all the obligatory subjects of the Preliminary, or of a Special, course.

3. Claims for attendance grants may be preferred on behalf of those students only who have been registered as in attendance at instruction in each of the prescribed subjects on or before the *1st day of November* in any academic year.

4. Grants will not be payable in respect of the attendances of pupils of any school which, after working for one academic year in accordance with the Department's regulations, has not the two years' Preliminary Course in operation.

5. Grants will not be payable in respect of attendances at Manual Instruction or Domestic Economy (Auxiliary Courses) in any year, except in the case of pupils who have attended instruction in the Preliminary Course of Experimental Science and Drawing or in one of the subjects of a Special Course, in that year, in accordance with the Regulations.

6. Grants will not be payable in respect of the attendances of a pupil at instruction in a subject of the fourth year, which was not the subject in respect of which a claim was made on behalf of the same pupil in the third year; except in the case of Geology.

7. Grants will be made only upon a satisfactory report by an Inspector of the Department. The Inspector will satisfy himself not only that the attendances on which the claim is based have actually been made, but also that the instruction is of a class superior to that given in Elementary Schools.

8. The grant to be made in respect of any subject of any year in accordance with the foregoing regulations, may, in exceptional cases, be increased by one-tenth when the Inspector of the Department is of opinion that the work is of conspicuous merit. It may also be reduced by one or more tenths for defects of equipment, or of organisation, or of instruction, or for any other cause which may tend to lessen the efficiency of the work done.

#### IV. REGISTRATION.

Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes (Form S. 44); attendances not registered in the manner indicated on the official registers, or registered before the receipt of Form S. 44, will be disregarded. A class may not be said to have begun until attendances are so registered.

#### V. COURSES OF INSTRUCTION.

##### 1. The Courses of Instruction include:—

(a.) A PRELIMINARY (TWO YEAR) COURSE, which is obligatory on all pupils and on all schools claiming grants under these regulations, and

(b.) SPECIAL COURSES, which are optional.

2. THE PRELIMINARY (TWO YEAR) COURSE may vary according to the character of the school; but it shall include Experimental Science and Drawing; and not less than three hours per week shall be devoted to Experimental Science, and not less than one hour per week to Drawing.

In schools claiming grants for more than six hours' instruction in the Preliminary Course in any week, Manual Instruction or Domestic Economy must form part of the Preliminary Course; and, in such cases, at least one and a-half hours' instruction per week must be devoted to one of those subjects.\*

In Schools also which do not provide instruction in one of the Special Courses, or whose Special Course has not been recognised by the Department for attendance grants, Manual Instruction or Domestic Economy, with Experimental Science and Drawing, shall constitute the Preliminary Course; and in order that the Preliminary Course in such schools may be recognised, the time-table must show that at least six hours' instruction per week is devoted to those three subjects.

3. A SPECIAL COURSE must include one, but may not include more than three, of the undermentioned subjects, to which Manual Instruction or Domestic Economy (unless taken as a Special Course) may be added. Managers will be allowed much latitude in selecting the subject or subjects most suitable to their own schools.

Managers desiring to have the special courses of their schools recognised will be required to show that a fair proportion of the pupils who have worked through the Preliminary Course are prepared to attend the Special Course; that not less than three hours per week are to be devoted to each subject of the Special Course; and that at least one-third of the time is to be assigned to theoretical instruction.

\* Attendances at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table.

Not more than six hours per week may be considered when computing the total number of hours of attendance at a subject included in a Special Course.\*

4. The subjects of the Preliminary and Special Courses shall be followed in the order prescribed in the Department's published Syllabuses, and pupils may not be admitted to any course, who have not worked satisfactorily through the preceding, or equivalent courses.

5. The subjects of the Special Courses are :—

- (1.) *Physics* : Third Year—General Physics, Heat, and (optional) Electricity and Magnetism; fourth year—(a) Wave Motion, Sound, and Light and Radiant Heat, or (b) Electricity and Magnetism. (Either or both fourth year syllabuses may be taken).
- (2.) *Chemistry* : Third year—Inorganic Chemistry; fourth year—Inorganic Chemistry, with some Elementary Organic Chemistry.
- (3.) *Mechanical Science* : Third year syllabus; fourth year syllabus.
- (4.) *Natural Science* :—
  - (a.) Botany : Third year syllabus; fourth year syllabus.
  - (b.) Physiology and Hygiene : Third year syllabus; fourth year syllabus.
  - (c.) Geology : A fourth year subject.

Each of these divisions of Natural Science will count as one subject in the manner indicated.

- (5.) *Domestic Economy (Special Course)* : Third year syllabus; fourth year syllabus.
- (6.) *Drawing* : Third year syllabus; fourth year syllabus.

#### VI. LABORATORIES.

No grant will be made for instruction unless due provision is made for experimental work in Science, on the part of the pupils, in properly equipped and approved laboratories.

#### VII. DURATION OF LESSONS.

1. Practical instruction in Science, Manual Instruction and Domestic Economy, must be given in lessons of at least eighty minutes' duration.
2. Lessons of less than forty minutes' duration will not be considered in computing the "total number of hours of attendance."
3. The minimum time per week recognised for grants on behalf of attendance at Manual Instruction or Domestic Economy is one and a-half hour.
4. The time-table of the school must be so arranged as to leave sufficient time to the teacher for preparation of laboratory work.

#### VIII. SIZE OF CLASSES.

1. Not more than forty pupils shall be taken at a time by one teacher for Theoretical Instruction, nor more than twenty for Practical Instruction in any subject, unless an assistant recognised by the Department is provided. In that case the number for Practical Instruction may be increased to thirty. Instruction in Drawing may, for this purpose, be regarded as theoretical instruction.
2. Where classes for practical instruction are small, concurrent instruction in two subjects may be exceptionally allowed, but the approval of the Department must be obtained in each case.
3. Concurrent instruction in the first and second year syllabuses of the Preliminary Course in Drawing will be allowed under one teacher where the number of pupils under instruction does not exceed thirty.

\* Attendance at Special Inspections may be claimed on, in addition to the hours set apart in the general time-table

## IX. GENERAL CONDITIONS.

1. The qualifications of the teachers and assistant teachers, and the time-table of the school must be approved by the Department.

2. It shall be a condition of grants being made, that, except in the case of teachers who give their services gratuitously, a fixed salary shall be paid to the teachers of the classes, either in respect of these classes or of their work in the school as a whole; that a reasonable sum of money shall be provided for the up-keep of the premises; and that the grants obtained shall be paid into the school account and be used for improving the efficiency of the school.

3. That portion of the income of a school which is derived from grants in accordance with these regulations must be applied to such purposes as shall be approved by the Department. If at any time it appears that the application of the income is unsatisfactory, the assistance of the Department may be withdrawn. An account of the receipts and expenditure of each school in respect of these grants must be furnished to the Department annually, on a form to be had from the Secretary.

4. The Department reserve the right to withhold grants under these regulations from any school conducted for private profit in which the fees are, in the Department's opinion, excessive, or which is situated in a locality already sufficiently supplied with public institutions.

5. The decision of the Department in all questions arising in connection with the payment of grants under this programme must be final.

## PROGRAMME FOR TECHNICAL SCHOOLS AND SCIENCE AND ART SCHOOLS AND CLASSES.

## I.

## EXPLANATORY CIRCULAR.

DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION-STREET, DUBLIN.

August, 1910.

SIR,

The Regulations for Technical Schools and Science and Art Schools and Classes, which were in operation during the Session 1908-10, will continue in force, with one alteration only, during the Session 1910-11. Regulation 8 at page 9 of the Programme has been extended in order to permit of small schools adopting specialised courses of instruction covering a period of two years only. Particular attention is, however, directed to the Prefatory Note in which some important revisions have been made.

Teachers attending the ordinary classes conducted in Technical Schools under the terms of Section II. of this Programme will not be required to adopt courses of study as provided for in paragraph 19, and will be at liberty to attend instruction in any subject or subjects a knowledge of which would be of advantage to them in their work. Grants in such cases will not be paid, in any one year, for more than three subjects in respect of any one teacher, and the payment for any subject will be at the rate appropriate to the year of syllabus followed.

Attention is directed to the terms of Section II., 9, under which it will be necessary for the Managers of Schools to submit, by the 30th September, full particulars of the courses of instruction which must be designed in consideration of local industrial conditions. The main subjects of each course should be indicated.

In order to facilitate the work of inspection, and the checking of the particulars as to previous training, etc., necessary in the cases of all students in respect of whom it is proposed to claim grants, the Department will require, by the 5th December in each year, a complete list of such

students showing the courses of study followed by each and their qualifications for admission to the courses. A form for this purpose will be issued in November.

The Department have found that the conditions in regard to the keeping of admission registers have not been generally complied with, and they desire it to be understood that Managers of Schools are expected to keep a systematic record of all students. A draft of an entrance form designed to meet the requirements of Section VII., 63, has been printed as Appendix C.

I am,  
Sir,  
Your obedient Servant,  
T. P. GILL,  
*Secretary.*

## II.

### PREFATORY NOTE.

The following Regulations are designed to provide supplementary aid towards the instruction given in Technical Schools and Classes. They also apply to certain institutions, other than Day Secondary Schools, which, prior to the issue of these Regulations, had received aid under the conditions of the Science and Art Directory of the Board of Education. The grants payable under these Regulations are from monies voted annually by Parliament. The Regulations, which have now been in operation for four years, were completely revised so as to bring them into accord with the conditions and needs of Ireland.

It was recognised that the funds for Technical Instruction derived from the rates and from the Department's Endowment were inadequate to meet the demands upon them owing to the rapid development of the Department's work in Technical Schools. The grant towards schemes of Technical Instruction from the Department's Endowment is limited by the amount of that Endowment. The grants under these Regulations vary in accordance with the amount and value of the educational work done. The Regulations are intended to encourage the efficient organisation of courses of instruction and to extend facilities for providing efficient teaching in the subjects of the Programme.

The Schools and Classes working under this Programme are mainly, though not exclusively, Evening Schools. It may be useful to indicate the position which teaching in evening classes occupies in relation to other branches of education. It is clear that instruction in evening classes cannot form a substitute for the more general and systematic education given in Day Schools, whether Primary, Secondary or Technical. The work of such evening schools and classes constitutes a specialised form of education intended to fit those receiving it for industrial or commercial pursuits, or to render those already engaged in such pursuits more efficient in their work. Instruction of this nature in evening schools has obvious defects; it possesses, however, certain well marked advantages. Attendance at such schools is purely voluntary. Those attending are for the most part engaged or about to be engaged in some form of industry—they have commenced the serious work of life—and are meeting problems and difficulties which the Evening Technical School can help them to solve. They perceive that the higher branches of their calling may be reached only by increased technical skill and knowledge. This being the case, the attitude of evening students to instruction is usually most favourable; but progress is hindered by several circumstances: hitherto the previous preparation of students joining evening Technical Schools has in many cases not been such as to fit them for the specialised form of instruction which it is the special function of such schools to impart. An attempt is made in these Regulations to remedy this defect. Before a student can take full advantage of a specialised course of instruction in any branch of Science or Technology he should at least be able to express himself clearly, both orally and by



means of writing and drawing; he should be able to make such elementary calculations as are required in all industries, and he should know something at least, and that something really and practically, of the fundamental principles of Science underlying all industrial work. Without this preparation a student cannot hope to profit by a specialised course. He will be continually handicapped and disheartened by the difficulties, and will tend to retard other members of the class who may be better prepared. When these conditions are not satisfied the young student should be given an opportunity to comply with them, and to this end should enter the Preparatory Course.

A certain standard of Elementary Education is obviously necessary for such a Preparatory Course as that set out in the Regulations. It will be necessary that schools should carefully refrain from registering, in the Preparatory Course, students who have not attained this standard. The Programme is not intended for any who have not attained this standard, and if they were allowed to enter upon the course, the bad effects would appear in the work of the specialised courses. The work of the Preparatory Course is intended to provide the necessary preliminary instructions for those not already qualified, and suggested Syllabuses of English and Mathematics suitable to the Course are contained in Appendix B.

A second difficulty is the shortness of time available for instruction in Evening Classes. For students engaged in arduous work during the day the amount of time devoted to evening technical school work must be severely limited. Speaking generally, not more than two evening attendances a week can be expected, for homework is essential if full advantage is to be derived from the work in class. The hours of school study thus limited become precious, and the organisation of the School and the efforts of the teachers should be earnestly directed to the most thorough utilisation of those hours, and to this end every lesson should be carefully prepared. It will, moreover, be obvious that, under such circumstances, regular attendance becomes a matter of the highest importance. The Department mark the sense of the importance of this by the "Increment Grant," under which largely increased grants are paid for continued attendance over twenty hours up to a limit of 120 hours.

Students who have satisfactorily passed through the Preparatory Course, which may occupy one, or, at most, two years, or who have in some other manner reached a satisfactory standard of education, may be registered for attendance in a course of instruction designed to extend over three or four years. A wide freedom is allowed under the Programme in order to permit schools to frame courses in accordance with the needs of the locality and its industries. It thus becomes necessary on the part of Committees of Schools and their Principals to make themselves familiar with the local industrial conditions and needs, and to frame courses of instruction in accordance with these conditions. It seems necessary to remark that such courses should be carefully considered and drawn up some time in advance of the opening of a new session in order that the Department's approval may be obtained. The Department may refuse where this has not been done to make any payments in respect of such courses.

It is necessary to point out that it is not enough, in drafting a course of instruction in any branch of technical knowledge, to indicate a number of subjects, some of which may be taken at the option of the student. What is wanted is that a course of work should be designed and Syllabuses should be framed by the teacher to meet the needs of those for whom the course is intended. This may, and no doubt will, somewhat restrict the number of those who can be claimed upon as following the course, but it will greatly increase its value to the technical student. If the Syllabuses be carefully drawn up no course need consist of more than two or three subjects, and optional subjects would become the exception rather than the rule. Instead of offering a number of Subjects a school should offer a number of Courses, and no student should be allowed to omit subjects of fundamental importance. Where, however, a student on entering a school shows a competent knowledge of the earlier stages of a Course of Study he may be allowed to join the Second or Third Year Course.

The Department will expect that Courses submitted for approval shall be accompanied by Syllabuses drawn up with a view to local needs.

They will accept, where these are appropriate, the Syllabuses of the Board of Education, the City and Guilds of London Institute, the Royal Society of Arts, etc., but each subject in each year of a course of instruction should be represented by a definite Syllabus of work graded to suit the successive years of the course. The Syllabuses in each subject should be so drawn up as to enable them to be covered in one session. When this has been carefully done the promotion of students will proceed automatically from year to year, and only in exceptional cases should it be necessary for a student to "repeat" the work of a year. Payments will not be made in respect of attendances at subjects lying outside the courses approved by the Department.

It will be obvious that the greatest importance attaches to the drawing up and organisation of these courses of instruction. In the first place it may be remarked that schools will be well advised to severely restrict the number of courses attempted.

While there are, no doubt, cases in which an exception may wisely be made, as a general rule students should only follow courses designed for the occupation they follow or intend to follow. The grant will vary according to the efficiency of the work of a school, and this in turn will in a large measure depend upon the manner in which the school is organised to meet local needs and to provide a suitable training for local industries. A well organised school will establish and maintain a careful and systematic record of all its students (vide Section VII. 63), in which will be readily available particulars of the previous educational experience of each student, his age and occupation, the course and subjects taken in successive years of attendance, and, where possible, will also contain some information about the career of students subsequent to their leaving the School.

It will be observed that encouragement is afforded by the scheme for efforts to secure regular attendance, and attendance for several successive years. The increased grants for instruction in successive years also afford facilities for the employment of more highly trained teachers than would otherwise be possible, and the Department will expect that for such advanced instruction teachers of ability and experience will be employed. In courses in Applied Science, for example, efforts should be made to secure teachers having experience in the particular industry to which the course applies.

### III.

#### REGULATIONS FOR GRANTS.

##### *I.—Conditions under which Schools and Classes may be recognised for Grants.*

1. The school or class must be under the superintendence of a County, County Borough, or Urban Technical Instruction Committee, or other responsible body of managers, recognised by the Department, to whom the grants will be paid.
2. Grants under these regulations will only be made in respect of schools or classes in Counties, County Boroughs or Urban Districts in which a rate for technical instruction is raised.
3. The premises in which classes are conducted, the accommodation and equipment, and the programme of instruction, must be approved by the Department.
4. The qualifications of teachers and assistant teachers and the timetable must be approved by the Department.
5. The managers of a school or class must make accurate returns of such particulars as are required by the Department and within the specified times.
6. The Department may from time to time require from Committees of Technical Instruction a report as to the provision made within their dis-

of this programme, regard being had to the industries of the district, and the occupation of the inhabitants, and may, upon consideration of this report, recognise or refuse to recognise any further classes which may be proposed.

7. The schools and classes shall be at all times open to the Department's inspectors, who will, from time to time, visit with or without notice, and report on the condition and suitability of the school buildings or classrooms; the character and quality of the instruction, and its suitability to the needs of the locality; the adequacy of the teaching staff for the number of students under instruction, the progress of the students, which they may ascertain in such a manner as they may consider necessary; the method of registration; and generally as to the organisation of the school work and the carrying out of the scheme of instruction in accordance with the Department's Regulations.

## II.—Technical Schools and Classes.

8. The authorities of each school working under this section must provide a series of suggested courses of instruction, which have grown out of a study of local industrial conditions. These courses of instruction should be made up of allied subjects, should be designed to extend over three or four years, and should be progressive in character. *In the case of small schools, however, two year courses may be accepted.*

9. The courses proposed by the authorities of each school must be submitted to the Department by the 30th September. These proposals will require the written approval of the Department. A draft of a convenient form in which to draw up the courses is set out in Appendix E.

10. In schools admitting students who possess only the minimum requirements for admission to a Technical School, a Preparatory Course should be provided.

11. The instruction should be given in evening classes, but where the Department consider that local circumstances justify the establishment of day classes, such classes may be formed.

12. An evening class is one in which instruction begins at or after 6 p.m. throughout the week, or at or after 1 p.m. on Saturdays.

13. A day class is one in which instruction begins before 6 p.m. throughout the week, or before 1 p.m. on Saturdays.

### (A).—PREPARATORY COURSE.

14. Classes conducted under this section should be of such a preparatory nature as will fit students to take up a specialised course of technical instruction.

15. The subjects of instruction in respect of which payments are made under this division are:—

- (a) English.
- (b) Mathematics.
- (c) One or more of the following:—

Experimental Science, Drawing, Manual Work in Wood or Metal.

16. Students on whom grants are claimed must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

17. All students under instruction in the Preparatory Course must attend instruction in each of the Sections (a), (b) and (c) of 15 above.

18. No student registered in the Preparatory Year Course will be eligible for payments in a Specialised Course in the same session.

### (B).—SPECIALISED COURSES.

19. A specialised course of instruction for any student on whom payment may be claimed shall consist of a scheme of study in two or more subjects of a course approved by the Department, and extending over three or more years.

In the first year of specialisation students must take up at least two and not more than three subjects, and in subsequent years not more than three subjects.

The Department will require, as a rule, that one main subject will be continued throughout each student's course of study. The instruction received in this main subject, as well as in other subjects approved as part of the course, will be eligible for grants at the rates appropriate to the year of specialisation of the student.

In courses for women, where a student adopts a course of study in which the main subject is a subject other than in Domestic Science, and which complies with the minimum requirements as to the number of subjects to be taken, the Department will allow grants in respect of instruction in Domestic Science, provided that not more than three subjects in all are taken in any year.

20. For the purposes of grants the subjects which may be included in specialised courses of study, and on which payment may be made, are grouped as follows, but courses of study may be taken from different groups.

Group A.—Commercial Subjects (Section A.)

- Group B.—(1) Commercial Subjects (Section B.)  
(2) Languages.  
(3) Mathematics.

Group C.—Science (Pure and Applied).

- Group D.—(1) Handicraft.  
(2) Domestic Science.

Group E.—Art Subjects.

Group A.—Commercial Subjects (Section A.).

Commercial subjects which involve mostly mechanical operations, such as shorthand, book-keeping, copying, indexing, filing, correspondence, typewriting, and the mechanical operations concerned with postage, telegraphy and banking.

Group B.—(1) Commercial Subjects (Section B.).

This group includes the study of subjects which require wider general knowledge and more intensive study than those in Group A., such as economics of industry and commerce, commercial law, accountancy, banking and currency, insurance, statistics, railway administration, and economic and commercial history and geography. The cost of these subjects is greater than those previously named, chiefly because a capable teacher of them demands a higher salary and is worthy of it.

(2) Languages.

The teaching of languages in the evening is partly a subject of general culture; is required partly for commercial correspondence; and partly for those who have to deal with the mechanical operations of seeing books and other literature through the press. The group, subject to the general conditions of grouping, may include Irish, French, German, Spanish, Italian, or any other language (including history and literature) which a committee can show to be required by the circumstances of a locality.

(3) Mathematics.

Mathematical subjects, including the treatment of the subject in a practical way, such treatment, for example, as is usually given under the subject of mensuration or of practical plane and solid geometry.

Group C.—Science (Pure and Applied).

Under pure science will be included such subjects as mechanics, physics, chemistry, biology, botany, zoology, physiology. Under applied science would be included naval architecture, navigation, nautical astronomy,

building construction, machine construction, and other subjects involving systematic instruction in the underlying scientific principles, and which would be classified under such headings as :—

- (1) Building industries.
- (2) Metal industries.
- (3) Textile industries.
- (4) Printing and process industries.
- (5) Furniture industries.
- (6) Leather industries.
- (7) Woodworking industries.
- (8) Carriage Building industries.
- (9) Electrical industries.
- (10) Chemical industries.
- (11) Agricultural industries.

At least half the instruction in subjects included in this group should be practical, and must be given under approved conditions of accommodation and equipment.

The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

*Group D.—Handicraft and Domestic Science.*

- (1) Handicraft—manual instruction in wood and metal, wood-carving.
- (2) Household subjects, including cookery and hygiene, housewifery, laundry-work, dressmaking, millinery, needlework.

*Group E.—Art Subjects.*

Drawing (free and mechanical), design, painting, architecture, modelling and applied art, such as black and white illustration, goldsmiths', silversmiths', and jewellers' work, stained glass work, mosaic, enamelling and any other subject of applied art which a committee can show to be required by the circumstances of their locality.

The first year of a student's course in Art must include instruction in both free and mechanical drawing.

21. The total attendances of any student at any approved course of study must be fairly distributed over the subjects of the course.

22. Students registered in this section must—

- (a) have satisfactorily followed the Preparatory Course, or
- (b) have passed in the Junior Grade Examination of the Intermediate Education Board, or
- (c) be certified by the Principal or responsible teacher to have reached an equivalent satisfactory standard of education.

23. In the case of students registered under 22 (c) the following particulars must be submitted in writing to the Department's Inspector for his approval :—

- (i.) any examinations passed which are regarded as equivalent to (b), or
- (ii.) the marks obtained at entrance examinations held in the Technical School. (The worked papers should be retained on the school premises); or,
- (iii.) any special reasons for admitting students to specialised courses.

*(III).—GRANTS.*

*(a) EVENING CLASSES.*

24. Grants will be made upon the total number of hours of attendance of fully qualified pupils, at the following rates :—

*Rates per Attendance-Hour.*

Preparatory Course, 2d.

Specialised Courses—

Year of Course.	Group A. Commercial Subjects. (Section A.)	Group B. (1) Commercial Subjects (Section B.), (2) Languages, (3) Mathematics.	Group D. Handicraft and Domestic Science.	Group C. Science (Pure and Applied).	Group E. Art Subjects.
	d.	d.	d.	d.	d.
First Year	2	4	4	6	4
Second Year	3	6	5	9	6
Third Year	4	9	6	12	9
Fourth and subsequent years.	5	15	6	21	12

25. The rates of grants payable in respect of each group may, in any school, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

26. An increment for continued attendance at instruction in the case of individual students will be paid on the total attendance-hours at all subjects of an approved course, in the preparatory or in the specialised courses.

*Rate of Increment for Continued Attendance.*

For each hour from 21 to 40 hours, 1d. per hour.

"	"	41 to 60	"	2d.	"
"	"	61 to 80	"	3d.	"
"	"	81 to 100	"	4d.	"
"	"	101 to 120	"	5d.	"

No increment will be paid on attendance-hours exceeding 120.

## (b) DAY CLASSES.

27. Grants to Day Classes will be made at half the above rates, and no increment on account of instruction given in these classes will be payable. Not more than 400 hours attendance in all in any one session may be claimed upon in respect of any student attending a day class.

## (iv.)—REGULATIONS FOR PAYMENT OF GRANTS.

28. A year's work will involve at least forty hours' instruction in the subject matter of any course of study, and students who have not satisfied this requirement in any year may not be registered for attendance grants in the next succeeding year in a higher course.

29. Students will be eligible for grants in the same Syllabus in a subject for not more than two School Sessions. Grants will not, however, be paid in respect of a second year's attendance in the same Syllabus should the student's attendance be claimed on generally at the rates appropriate to a higher year of specialisation.

30. Students will be eligible for grants for not more than two School Sessions at the rates for the preparatory course, or for any one year of specialisation.

31. The attendance of teachers at day classes may be paid upon at evening rates.

### III.—*Teachers' Classes.*

32. Where special classes or courses are established at a Technical School or Central Institution (either than a Training College) for the instruction of teachers of Primary or Secondary Schools in the subjects of this programme, in accordance with a scheme approved by the Department, grants may be paid at the rate prescribed for the third year of specialisation under Section II., 24, of this programme.

33. Payments may be made in respect of any teacher for any subject for not more than three years, and will be at the same rate for each year.

34. The amount of grant payable under these rates may in any school, upon grounds of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

35. No increment grants will be payable under this Section.

36. The Instructors must be recognised by the Department as qualified for this special work.

37. Proposals for the conduct of classes under this Section must be specially submitted for approval, and should include particulars as to the number and status of the teachers for whom the class or course is organised, the proposed syllabus of instruction, and the special qualification of the teacher.

38. Classes working under this Section will be required to submit to such examination as the Department may decide.

39. Grants will not be paid in respect of the attendance at these classes of students other than teachers actually engaged in Primary and Secondary Schools.

### IV.—*Day Schools for Apprentices and Others engaged in Business.*

40. Day technical or commercial schools or classes, which are conducted by properly constituted managers, either in conjunction with works, business houses, or technical schools, with a view to improving the conditions of local industries and commerce, and to the further training of sub-managers, foremen, tradesmen or apprentices, may be admitted for grants under this section.

41. Such schools or classes must be open on one or more days of the week, not later than six o'clock in the evening, or than 1 p.m. on Saturdays.

42. Grants not exceeding three-fourths of the certified annual expenditure for the conduct of such schools or classes may be made by the Department in respect of students for whom an employer's certificate can be produced, showing that the students have been engaged during the session in a business, trade, or industry, or that they are indentured or properly engaged as apprentices to a firm or to an individual.

43. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers.

44. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

45. The accommodation provided, the courses of instruction, the syllabuses of the subjects taught, the qualifications of the teachers, the timetable of instruction and the estimate of expenditure, must be approved by the Department.

46. The practical work must be so arranged as to be illustrative of the principles taught, and should not be directed to developing dexterity in the practice of trade processes.

47. Grants will not be paid under Section II. of these Regulations in respect of students attending classes conducted under this section.

48. The amount of grants payable in respect of any school may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

## V.—Schools of Art.

48. Schools of Art, which provide for students, the majority of whom are industrial, courses extending continuously over two or three years, according to a scheme approved by the Department, may be paid grants not exceeding three-fourths of the actual annual expenditure incurred in the conduct of such courses.

49. The expenditure must be set forth in properly audited accounts, to be accompanied by vouchers. An estimate of the expenditure must be submitted for the approval of the Department before the commencement of the session.

51. The decision of the Department as to what constitutes a legitimate charge against annual expenditure shall be final.

52. No grants will be payable to Schools of Art adopting this section of the regulations, under the methods of payment set out in Section III.

53. Recognition may be withheld or withdrawn from any School of Art in which, in the opinion of the Department, the efficiency of the instruction and the number of students in attendance do not justify the expenditure involved.

54. For the purposes of this section a School of Art must satisfy the following conditions:—

- (a) The rooms and equipment must be approved by the Department, and must be wholly devoted to elementary and advanced instruction in art.
- (b) Provision must be made for drawing from life and modelling, and for instruction in ornamental and decorative art.
- (c) The Principal Teacher must hold an art master's certificate or an equivalent qualification.
- (d) Assistant teachers must possess qualifications recognised by the Department (*vide* Appendix A.).
- (e) Both day and night classes must be held. The night class must meet under the instruction of the Principal Teacher for two hours for at least three nights per week during forty weeks of the year, and the day class for the same period for at least three hours per day on two days of the week.

55. The amounts of grants payable in respect of any school, may, upon account of conspicuous merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, in consideration of their Inspector's report, may determine.

## VI.—Training Colleges.

56. Grants may be made for the instruction of students in training colleges in mathematics, experimental science, and drawing.

57. The rates per attendance-hour at which grants will be paid are as follows:—

	First Year.	Second Year.
	d.	d.
Mathematics, . . . . .	2	3
Experimental Science, . . . . .	3	4½
Drawing, . . . . .	2	3

58. No increments will be payable on such attendances.

59. Not more than 400 hours in all, nor more than 200 in any one of these subjects, may be allowed for purposes of grants in the case of any one student.

60. Grants in respect of any student may be claimed once only in the first year course and once only in the second year course.



61. The rates per attendance-hour may, upon account of exceptional merit, be increased by one-tenth, or, upon grounds of inefficiency, be decreased by one or more tenths, as the Department, on consideration of their Inspector's report, may determine.

62. Syllabuses of the courses of instruction must be submitted at the beginning of the session for the Department's approval.

#### VII.—General Regulations.

(Applicable to all Schools and Classes conducted under this Programme).

63. Each school or class working under these regulations will be required to keep an admission register which shall show for each student:—

- (1) full name and date of birth,
- (2) business, trade, or occupation,
- (3) School or college at which the student received his general education, and standard of education attained, with particulars of highest examinations passed,
- (4) qualifications to enter a technical school, or class,
- (5) classes attended each session in the school.

*Note.*—Suitably drafted admission forms may be made to fulfil the Department's requirements for an admission register. In larger schools it will be found more convenient to adopt the card-index system, the particulars required being transferred from the students' admission forms.

64. The registration of students must be conducted in accordance with the regulations set out on the official registers.

Attendance registers will be supplied by the Department upon receipt of the form of application for recognition of the classes; attendances not registered in the manner indicated on the official registers for the session will be disregarded. A class may not be said to have begun until attendances are so registered.

65. The latest date for registration of classes on account of which grants are to be claimed shall in any session be December 1st.

66. Each student must be registered as in attendance at instruction in his course on or before the 1st December in any session.

67. Lessons must be of one, one-and-a-half, two, or two-and-a-half hours' duration. Laboratory or workshop practice must be given in lessons of not less than one-and-a-half hours' duration.

68. Not more than forty students may be taken at a time by one teacher for theoretical instruction, nor more than twenty for practical instruction in any subject, unless an assistant, recognised by the Department, is provided, in which case the number may be increased to thirty. The special circumstances of large institutions will be exceptionally considered by the Department on written application.

69. Each class in any subject must receive at least twenty hours' instruction in the session.

70. No grant will be paid for the attendances of any student in a subject in which he has made less than ten hours' attendance.

71. No grant will be paid on account of any attendances lost, or on account of any period during which the school is closed for epidemic illness, but where the Department are satisfied that any failure to comply with these regulations has been due to epidemic illness or other unavoidable cause, they may relax the regulations as far as may be necessary to meet the case.

72. If any of the conditions on which the grant is awarded are not fulfilled, the Department may withhold the grant, or, if they think fit, may pay the grant with or without deductions, warning the managers that a grant will not again be paid under similar circumstances.

73. Students may not be registered for grants under these regulations who are under fourteen years of age on the 1st December, and no student can be registered for grants under these regulations in respect of whom any grant is paid by the Department under any other regulations.

74. No grants may be claimed under these regulations on account of any scholar on the roll of a school (day or evening) under the Board of National Education.

#### VIII.—QUALIFICATIONS OF TEACHERS.

75. It is not proposed, in future, to demand the same high qualifications from teachers in small schools as from teachers in the larger technical institutes, especially in the county boroughs, nor to approve of the larger institutions employing teachers who might for economic or other reasons have to be accepted as teachers in small schools. Each application will be dealt with on its merits, bearing in mind the special circumstances of each district, and the finances of the school. Some of the certificates which will be accepted for provisional recognition by the Department are, however, set out in Appendix A.

76. The final appointment of a teacher should not be made until his qualifications have been approved in writing by the Department.

77. A register is kept by the Department containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject to the satisfaction of the Department for at least one session.

#### IX.—(a) LOCAL SCIENCE AND ART SCHOLARSHIPS.

78. Where County Committees of Technical Instruction have established a system of Scholarships for boys as part of the approved scheme of technical instruction for the county, the Department may make a grant in aid of the Scholarship fund not exceeding half the value of the Scholarships awarded. This grant will not in the case of any county exceed £50 in any one year.

#### (b) LOCAL EXHIBITIONS.

79. Where Technical Instruction Committees establish, in connection with Technical Schools in County Boroughs or Urban Districts, for students of proved ability and ascertained need, and under the terms of a scheme approved by the Department, one or more Exhibitions, of the annual value of £50, tenable at the Royal College of Science, the Metropolitan School of Art, or other approved Technical, Commercial, or Art school, the Department may make a grant in aid of the Exhibitions awarded, not exceeding half their value, provided that the Department's total contribution in this respect does not exceed £50 in respect of any one Urban District, other than a County Borough, in any one year. Candidates for these exhibitions must be eighteen years of age, they must have been in regular employment under normal conditions in a trade, business, or industry for at least a year; they must have been in attendance at a Technical School within the administrative area of the nominating Committee for at least two complete and consecutive sessions; and they must satisfy the Department that their general education is of such a nature as to enable them to take full advantage of the course of instruction selected at the approved day school of higher education.

80. In the case of exhibitors whose admission to the Royal College of Science for Ireland, Dublin, or the Metropolitan School of Art, Dublin, has been sanctioned by the Department, the fees for tuition at these Institutions will be remitted. Where the Exhibition is held in a school, under the management of the Technical Instruction Committee by whom the Exhibition is established, the Department will require that the Committee shall remit the fees for tuition. In the case of all Exhibitions held at other approved Institutions, the Department will be prepared to pay half the fees for tuition in an approved Course provided that the Technical Instruction Committee, by whom the Exhibition is established, provide the other half from their funds. The Department's grant in such circumstances will not, however, exceed the sum of £10 in respect of any one exhibition.

81. Successful candidates must devote their whole time during the period for which the Exhibition is granted to the advancement of their

studies. Committees proposing to establish Exhibitions must submit, for the Department's approval, a scheme for the award of Exhibitions.

82. The Department may refuse to aid any Exhibition if there is not a sufficient number of competitors, or if the selected candidate does not, in their opinion, show sufficient merit to justify the award of an Exhibition.

#### X.—CERTIFICATE OF SATISFACTORY COMPLETION OF COURSE.

83. It is proposed that a certificate should be issued to any student who follows out a sufficiently satisfactory course, extending over at least two years of specialisation, and an Honours certificate to any student who follows an approved course extending over at least four years of specialisation. The certificate forms will be prepared and filled in locally, and signed by the chairman of Committee and Principal of the school. The Department will afterwards stamp them to give them authoritative recognition. The names of the subjects of the course in each year, the number of hours' instruction, and the number of years' attendance should be inscribed on the back of the certificate.

84. The Department may, as necessity arises, modify or add to this Programme; but no important changes will be made without due notice.

85. The decision of the Department in all questions arising in connection with the payment of grants under this Programme must be regarded as final.

#### APPENDIX A.

##### QUALIFICATIONS OF TEACHERS.

A register has been formed, containing the names of teachers who, after provisional recognition by the Department in any subject, have taught a class in that subject, to the satisfaction of the Department, for at least one session.

Provisional recognition will, as a rule, be accorded in respect of the following qualifications:—

1. The Degree of any University, or the Diploma of an approved Day Technical University College, in respect of subjects taken at the final examination for the Degree or Diploma.
2. Full Technological Certificates in the First Class of the Honours Grade of the City and Guilds of London Institute.
3. The Irish Secondary Teachers' Drawing Certificate in respect of elementary instruction in Art subjects, such, for example, as the teaching of Drawing to classes of the Preparatory year.
4. The Irish Secondary Teachers' Honours' Drawing Certificate in respect of the subjects named on the certificate. In county boroughs, and in the larger technical schools where circumstances appear to demand it, higher qualifications will be looked for.
5. The Department's Diploma in respect of Domestic Economy subjects in the case of students trained at the Irish Training School of Domestic Economy.
6. Diplomas in respect of Domestic Economy subjects awarded by the Board of Education, by the National Union, or by the late Kildare-street School of Cookery, now the Irish Training School of Domestic Economy.
7. Certificates in respect of Manual Instruction issued by the Department at the close of courses of training of Manual Instructors conducted in Dublin.
8. The Teachers' Certificates in Manual Training (Woodwork and Metalwork) of the City and Guilds of London Institute, and the Teachers' Higher Certificates (Woodwork and Metalwork) of the Board of Examinations for Educational Handwork.
9. Certificates of Class I., Stage III., of the Royal Society of Arts.
10. Teachers' Diplomas of the London Chamber of Commerce in respect of commercial subjects and languages named thereon.
11. Pitman's Full Teacher's Certificate for Shorthand.
12. The certificate of the National Board, in respect of English and Mathematics of the Preparatory year.

First-class Certificates in Stage II. of Science subjects of the Board of Education will not alone be recognised as sufficient qualification to teach the subject named on the certificate.

For recognition as teacher of a modern language, high attainments, and some conversational ability, will be looked for.

Specially qualified persons will always be exceptionally recognised; but such recognition will be granted only when the applicant for recognition has satisfied the Department that he is specially qualified. Applications for special recognition should be accompanied by a complete detailed statement of the applicant's course of study and work; and should be supported, as far as possible, by certificates from professors or employers. In order to determine finally whether a teacher has sufficient technical knowledge of the subject which he seeks to teach, the Department may request him to undergo a special examination. Such special examination will, as a rule, be held in Dublin; and the applicant will have to bear his own travelling and personal expenses in connection therewith.

Registration of a teacher's qualification may be suspended (or further provisional recognition refused) upon evidence of insufficient knowledge of a subject for teaching purposes, or of inefficiency as a teacher from whatever cause arising.

## EXAMPLES OF SCHEMES OF TECHNICAL INSTRUCTION IN NON-AGRICULTURAL SUBJECTS.

### COUNTY CORK.

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911

The scheme, subject to the provisions requiring local contributions from rates, is applicable to all the Urban Districts (with the exception of Queensdown) and to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the scheme—Urban Districts, 32,994; Rural Districts, 287,586; total, 320,580.

Valuation of the County.—Urban Districts, £43,889; Rural Districts, £1,024,986; total, £1,068,875.

Value of 1d. rate:—Urban Districts, £266; Rural Districts, £4,270; total, £4,536. The local contribution from the rates will be paid over to the Committee (a) by the County Council in instalments in September, December, March, and July; and (b) by the Urban District Councils at various dates before the end of the financial year.

#### Technical Instruction Committee.

The Committee is a Joint Committee of the Cork County Council and the Urban District Councils of Clonsilla, Fermoy, Kinsale, Macroom, Mallow, Middleton, Skibbereen, and Youghal. It consists of twenty-eight members, of whom seven are Councillors and twenty-one added members.

#### Chief Industries.

The most important industries (excluding agriculture and allied industries) of the Urban and Rural Districts of the County are:—Building trades, distilling, brewing, shipping, fishing, lace-making, brick-making, stained glass-making, flour manufacture, woollen manufacture, chemical works, mineral water works, condensed milk, ferromite, tanning, paper manufacture.

#### Objects of the Scheme

The objects of the scheme are to provide, mainly by means of evening schools and itinerant classes, instruction in science, art, technological, commercial, and domestic economy subjects, chiefly for persons engaged in various industries during the day.

The scheme is set out under the following heads :—

- I. Finance.
- II. Evening Schools.
- III. Technical Classes for Girls.
- IV. Scholarships for Girls.
- V. Domestic Economy Day Classes.
- VI. Instruction in Manual Work and Domestic Economy.
- VII. Preparatory Course of Instruction.
- VIII. General Conditions.

# I. FINANCE.

## A. Estimated Income:

(1) Contribution from the County Council (the produce of a rate of ½d. in the £ levied over the Rural Districts in the financial year ending 31st March, 1911) ... ..	£2,130
(2) Contributions from the Urban District Councils of Clonakilty, Fermoy, Kinsale, Macroom, Mallow, Middleton, Shibboreen, and Youghal (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911)...	230
(3) Contributions from the Department:	
(a) From Endowment ... ..	£2,125
(b) Grants for Instruction in Science, Art, &c. ... ..	300
(4) Students' Fees ... ..	200
(5) Sundry Receipts ... ..	50
<b>Total</b> ... ..	<b>£5,085</b>

## B. Estimated Expenditure:

(1) Evening Schools, Domestic Economy Day Classes, and Itinerant Classes (rent of rooms, payment of teachers other than those specified below, heating, lighting, materials, advertising, &c.) ... ..	£1,350
(2) Two County Art Teachers (Salaries and Expenses) ... ..	400
(3) One Chemistry Teacher (Salary and Expenses) ... ..	180
(4) Three Special Teachers of Commercial Subjects (Salaries and Expenses) ... ..	905
(5) Eight Itinerant Instructors in Woodwork (Salaries and Expenses) ... ..	1,580
(6) One County Teacher of Lace-making and Design (Salary and Expenses) ... ..	110
(7) Four County Instructresses in Domestic Economy (Salary and Expenses) ... ..	530
(8) Technical Classes for Girls ... ..	75
(9) Residential School of Domestic Training, Dunmanway:	
(a) Scholarships for Girls ... ..	440
(b) Salary of Certificated Teacher of Domestic Economy ... ..	100
(c) Salary of Assistant Teacher ... ..	40
(10) Administrative and incidental expenses, viz.:	
(a) Secretary's Salary ... ..	150
(b) Assistant's Salary ... ..	42
(c) Office Expenses, including Printing, Stationery, Advertising, &c. ... ..	210
<b>Total</b> ... ..	<b>£5,627</b>

## C. Allocation of Accumulated Funds:

Of the funds remaining unexpended from the working of the scheme in the academic year 1909-10, the sum of £392 will be appropriated to meet the estimated deficit on the working of the scheme for the present session. The remainder will be applied in establishing classes other than those already provided for above, in providing additional equipment and

apparatus, and for such other purposes as the Committee, with the approval of the Department, may, from time to time, determine.

## II. EVENING SCHOOLS.

The Committee will, subject to the written approval of the Department, establish, or aid in establishing, so far as the funds at their disposal permit, Evening Technical Schools or Classes, in places to be previously approved by the Committee and the Department:—

- (a) 1. By acquiring, or giving aid towards acquiring, accommodation for Technical Classes:
  - (i.) At rent for short term; or
  - (ii.) At rents for lease; or
  - (iii.) By purchase.
2. By building, or giving aid for building, if necessary, Technical Schools.
- (b) By paying, or giving aid towards the payment of, a staff of permanent and temporary teachers. The temporary staff to be engaged by the hour, week, month, or season, as the case may be; the permanent staff to be engaged as whole-time officers on annual salaries.
- (c) By providing, or giving aid towards providing, equipment.

### *Conditions Under Which Classes will be Held.*

1. Classes must contain a fair proportion of industrial or commercial students eligible for recognition under the Department's Programme for Technical Schools and Science and Art Schools and Classes.
2. Classes must be conducted in accordance with the regulations of that Programme.
3. Classes must meet for not less than twenty hours' instruction in the session.
4. Theoretical lessons must be of not less than one hour's duration, and practical lessons of not less than ninety minutes' duration.
5. Classes may not be conducted for grants under the Regulations for Elementary Evening Schools of the Commissioners of National Education.
6. The subjects of instruction must be suitable to the locality.

## III. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £1 10s. 6d. per pupil for any number not exceeding ten, and at the rate of 15s. per pupil for the remainder of the class, will be paid in respect of the attendance of girls at instruction in lace-making, crochet-making, needlework, sprigging, embroidery, drawn thread-work, shirt-making, or such other industrial or domestic subjects as may, from time to time, be approved by the Department.

### *General Conditions for the Conduct of Classes and Payment of Grants.*

1. The industry in which instruction is given shall be suited to the circumstances of the locality.
2. The grant may be claimed on account of pupils who have received during the session not less than 240 hours' instruction, as specified in Section 4 below.
3. Grants may be paid in respect of a pupil's attendance at instruction in any one industrial subject for not more than two school sessions, but where circumstances have made it desirable to introduce a new industry, grants may be paid on account of a pupil for not more than three school sessions in all.
4. The pupil, as part of the 240 hours' instruction, shall receive at least 40 hours' instruction in Domestic Economy subjects. (The 40 hours' instruction may be given in twenty lessons of two hours each, and must include practice. At least 30 hours must be devoted to Cookery; 10 hours may be given to Laundry Work. Not more than 60 hours' instruction in Cookery and Laundry Work may be reckoned in the total of 240 hours.)

(Note:—In order to assist managers of classes working under this section of the scheme, to satisfy the conditions in regard to instruction in Domestic Economy, the Committee may, if they think it desirable, send a County Instructors to give the required course of instruction. It must be understood that where the services of the Committee's Domestic Economy Instructors are granted, the managers of the class are required to provide fire, light, and the necessary materials. The instruction given must be such as is applicable to the home life of those attending the course.)

5. The equipment and instruction must be satisfactory. (The Department's Inspectors will be specially directed to report how far the work is instruction, and how far the practice of an industry.)

6. The Sales and Wages Book and Attendance Registers must be satisfactorily kept.

7. Grants will not be payable in respect of the attendance of pupils who are not over fourteen years of age at the time of admission to instruction, or who are on the Roll of a National School or of an Industrial School under the Irish Industrial Schools Act.

8. Grants will not be payable under this section in respect of instruction in an industrial subject given by a teacher employed by the Committee.

9. Managers intending to claim grants under this section must forward Form S.47 to the Offices of the Committee on or before the 1st October, 1910.

10. Instruction must begin, under a recognised teacher, before the 1st December at the latest.

Should the sum (£75) allocated for the purpose of this section of the scheme not enable the Committee to pay off all the claims in full, at the rates mentioned above, the amount available will be divided in proportion to the claims admitted.

#### IV. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1911, award not more than four scholarships, of the value of £10 each, to girls who have received an education equivalent to that of the Fifth Standard of a National School, to enable them to attend a regular course of instruction and training in domestic economy. The object of such scholarships is to cultivate intelligence and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds. The Scholarships are tenable for one session, and no scholar will be awarded a Scholarship for a second year.

The Scholarships will be tenable at the Residential School of Domestic Training, Convent of the Sisters of Charity, Dunmarway. Selected candidates will be required to pay a fee of £4 to the Managers of the School, on or before the date of entrance, and a further sum of £4 on or before the 1st January, 1912, and these sums, together with the amount of the Scholarship to be paid by the Committee to the School Managers, will entitle the scholar to board, residence, and training for one academic year.

##### I. *General Conditions Regulating the Award of the Scholarships.*

##### (1) The Scholarships will be tenable only by girls

(a) Who are over sixteen and under twenty-five years of age on the 1st of June, 1911; and

(b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st of June, 1911.

(2) The selection of the scholars will be made by a Selection Committee of the Technical Instruction Committee, who will satisfy themselves, by whatever means they consider desirable, that the scholars selected have received an education equivalent to that of the Fifth Standard of a National School.

(3) Forms of application for Scholarships may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 2nd of June. Each application must be accompanied by not less than two testimonials, one of which must be from a local clergyman, and one from a District or County Councillor.

(4) Selected candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(5) Selected candidates shall enter the Residential School for a fortnight on probation. Any candidates found unsuitable to undergo the course of training will, at the expiration of the period of probation, be required to leave, and their places shall be filled by selection from the other qualified candidates. The fee paid to the School Managers shall be refunded to those scholars who are required to leave the School under these conditions.

(6) The amount of the Scholarships will be paid to the Managers of the Schools in two half-yearly instalments, one on or about the 31st January, the other on or about the 31st July. Payment of these instalments will be authorised by the Department on receipt of satisfactory reports from their Inspectors.

(7) All Scholarships shall terminate on the 31st July, 1912.

(8) The Committee may refuse to award the full number of Scholarships should a sufficient number of suitable candidates not be forthcoming, and they may determine a Scholarship at any time, without notice, upon being satisfied that its continuance is for any reason undesirable.

(9) In the case of difficulties arising in connection with the awarding or holding of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

An advertisement of the Scholarship Scheme will be inserted once, early in the month of May, in the newspapers circulating within the area administered by the Committee.

## *II. Conditions Regulating the Recognition of Residential Schools of Domestic Training.*

(1) In order that a Residential School of Domestic Training may be recognised by the Department under this Scheme, the Managers must provide a satisfactory course of instruction in the following subjects :—

Household Management (including the keeping of accounts).  
Cookery (including the selection of menus for small incomes).  
Needlework (repairing, adapting, and dressmaking).  
Laundrywork.  
Hygiene (including sick nursing and the care of the young).

At least thirty hours per week must be devoted to the foregoing subjects. The curriculum may also include one or more of the following subjects if adequate provision is made for both practical and theoretical instruction :—

Dairy-work.  
Poultry-rearing.  
Bee-keeping.  
Cottage Gardening.

(2) There must be on the staff of the School a certificated teacher of Domestic Science, who devotes at least thirty hours per week to the instruction of residential pupils. If the number of pupils exceeds 18, there must be one such teacher for each 18, or fraction of 18, pupils.

(3) The School Managers must satisfy the Department that the dormitory accommodation, and other provisions, of the School are adequate and satisfactory.

(4) Within a fortnight after the re-opening of the School in any year, the Managers must forward to the Department the complete time-table on Form S.148, copies of which will be furnished by the Department upon application. This time-table will show the distribution of time to the various subjects of the course, and must receive the written approval of the Department.

(5) The School shall be at all times open to the Inspectors of the Department.

## V. DOMESTIC ECONOMY DAY CLASSES.

Grants for instruction given by Nuns, who have been trained under the County Cork Scheme of Technical Instruction, and whose qualifications



have been recognised by the Department, will be allowed by the Committee under the following conditions:—

**NOTE:—**Pupils attending Day Secondary Schools, National Schools, Industrial Schools (Government aided), or Technical Classes (Section III. of Scheme) may not be enrolled in these classes.

(1) The Committee will pay £7 10s. for each course of instruction. A course will consist of fifty lessons, of two hours' duration each. Approval of the proposed time-table must be obtained from the Department before a course is started.

(2) Not more than £40 will be paid by the Committee to any one teacher appointed under this Scheme in any academic year (1st August to 31st July). Two courses conducted concurrently will not be recognised unless one of the courses at least has a full complement of sixteen pupils.

(3) A pupil may not be registered for more than two courses, and may not be registered for two courses conducted concurrently.

(4) New pupils may not be admitted to any course after the sixth lesson of that course.

(5) No payment will be made for any course of instruction in which the average attendance for the whole course falls below six.

(6) Reasonable charges for materials, fire, and light, used for class teaching, and for necessary advertising, will, on the production of satisfactory vouchers, be paid by the Committee.

(7) The fee to be paid by each pupil shall be 2s. for each course, and shall, together with any receipts from the sale of cooked dishes, be paid over to the Committee.

(8) A sum, not to exceed 2s. 6d. per week, may be allowed by the Committee towards the expenses of cleaning, lighting fires, &c., in connection with each course.

(9) The classes shall be open to females of all religious denominations.

(10) Notification of the formation of the classes must be submitted to the Committee on Form S.95.

## VI. INSTRUCTION IN MANUAL WORK AND DOMESTIC ECONOMY.

The Committee, in order to meet the wants of remote Rural Districts, will appoint itinerant instructors in manual training (woodwork) and in domestic economy. These teachers will give courses of instruction at centres (not already provided for by evening classes) to be approved by the Committee and the Department.

## VII. PREPARATORY COURSE OF INSTRUCTION.

A Preparatory Course, in connection with the Programme for Technical Schools and Science and Art Schools and Classes, will be opened at Clonsilla. This course will consist of instruction in English, mathematics, and drawing, and is intended for pupils who possess only the minimum requirements for admission to an Evening Technical School. The training afforded will be of such a nature as will fit them to take up a special course of technical instruction.

Applicants for admission to the course must have received such an education as would entitle them to be placed in the sixth class of a school under the National Board.

All students under instruction are required to attend instruction in each subject of the course.

## VIII. GENERAL CONDITIONS.

(1) The Scheme is not intended to apply to children under fourteen years of age, but such children who have been placed in the Sixth Class of a National School, or who have received an equivalent education, may be admitted to classes provided that there is accommodation available. Under no circumstances may scholars on the roll of a Primary School attend classes under this Scheme, which meet during Primary School hours.

(2) Schools or classes conducted or aided under the provisions of the Scheme shall be at all times open to the Department's Inspectors. (The

Inspectors will, from time to time, report to the Department on the condition and suitability of the school buildings or class-rooms, the character of the instruction and its suitability to the needs of the locality, the sufficiency of the teaching staff for the number of students under instruction, the progress of the students—which they may ascertain in such a manner as may be necessary—the method of registration, and, generally, the observance of the provisions of the Scheme.)

(3) Classes conducted or aided under the Scheme shall not be of such a size as to impair the efficiency of the instruction. (A practical class should consist of not more than twenty students under one teacher, and a theoretical or demonstration class of not more than forty students. Local Committees should assist teachers in keeping classes within these limits.)

(4) Control will be exercised over the admission to classes so that students may take only associated subjects, and admission to certain classes may be limited by entrance examinations in order that the classes may be of a manageable size, and that students selected may be capable of taking full advantage of the instruction.

(5) Classes will, unless in exceptional circumstances, be closed should the average attendance for four successive lessons fall below six.

(6) Attendance Registers shall be carefully, regularly, and punctually marked.

(7) A Local Committee of Management shall be formed in each centre in the Rural Districts where classes are to be held. The Committee formed shall appoint an Honorary Secretary, and place itself in communication with the County Joint Committee. In an Urban District the classes shall be under the management of a Local Committee appointed for this purpose by the Urban District Council. Wherever the instruction of girls is involved a number of ladies should be included in the Local Committee.

The duties of a Local Committee are :—

(a) To arrange for suitable accommodation for the courses of instruction to be given; to awaken local interest, and to make due provision for the starting, or resumption, of the courses.

(b) To assist in securing regular and punctual attendance at the classes.

(c) To visit the classes from time to time, and to check and sign the registers, and

(d) To make recommendations to the County Committee as to local requirements in connection with the classes.

(8) Full particulars of the qualifications and experience of any teacher whom it is proposed to engage shall be submitted to the Department, and their approval of the appointment obtained, in writing, before the appointment is actually made.

(9) The previous written approval of the Department shall be obtained for any expenditure upon additional equipment, or for any purpose not covered by the proposals under the head of Finance. (Approval of such expenditure will not be given unless the proposals have been submitted for the Department's sanction before any liability is incurred.)

(10) Accurate returns of such particulars as are required by the Department shall be made at the specified times.

(11) Within seven days after any meeting of the Committee, a copy of the minutes of proceedings of that meeting, as entered in the minute book, shall be furnished to the Department.

(12) The accounts of the Committee shall be treated as part of the accounts of the Local Authorities, and will be audited as such by the Auditor of the Local Government Board.

(13) No money shall be spent under this Scheme in an Urban District unless the Urban District contributes annually a rate of one penny in the £ or its equivalent.

The Scheme is subject to revision at the close of the academic year.

## COUNTY FERMANAGH.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Enniskillen, and to the Rural Districts within the administrative area of the County Council.

Population of the County :—Urban District, 5,412; Rural Districts, 60,018; total, 65,430.

Valuation of the County :—Urban District, £14,300; Rural Districts, £228,106; total, £242,406.

Value of 1d. rate :—Urban District, £60; Rural Districts, £950; total, £1,010.

The local contribution from rates will be paid over to the Committee in two instalments, in April and October, 1910.

*Chief Industries.*

The population is almost entirely devoted to agricultural pursuits.

*Objects of the Scheme.*

The objects of the Scheme are to provide instruction in lace and crochet-work, needlework, manual training (woodwork), domestic economy, and hygiene.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Instruction in Industries.
- III. Instruction in Domestic Economy Subjects and Manual Training.
- IV. Training School for Lace Teachers.
- V. General Conditions.

## I. FINANCE.

*A. Estimated Income :*

(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1911 ... ..	£350
(2) Contribution from the Urban District Council of Enniskillen (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911) ... ..	59
(3) Contributions from Department :—	
(a) Annual contribution from Endowment ... ..	2400
(b) Grants for instruction in science, art, &c. ... ..	115    515
(4) From extern Day Secondary School for services of Teachers ... ..	69
Total ... ..	£2984

*B. Estimated Expenditure :*

(1) Salaries and expenses of teachers of industrial subjects ... ..	£299
(2) Salary of instructress of domestic economy ... ..	105
(3) Salary of instructor in manual work ... ..	125
(4) Salary of principal of Enniskillen Technical School ... ..	165
(5) Salaries of other teachers at Enniskillen Technical School ... ..	40
(6) Salary of commercial teacher ... ..	70
(7) Travelling expenses of teachers referred to at (2) and (3) and class expenses ... ..	65
(8) Rent of Technical School at Enniskillen ... ..	39
(9) Administration and incidental expenses :—	
(a) Secretary's salary ... ..	£60
(b) Office expenses, printing, stationery, advertising, &c. ... ..	45    105
Total ... ..	£2984

## II. INSTRUCTION IN INDUSTRIES.

To improve the work in lace and crochet-making and in needlework carried on throughout the county, the Committee may appoint nine teachers. These teachers will give instruction at centres to be fixed by the Committee, with the approval of the Department, and each teacher will be required to give two lessons of three hours' duration each, on three days per week (or an equivalent amount of teaching), throughout the Session. The two lessons per day may, or may not, be given in the same centre; but arrangements will be made whereby at least six hours' instruction per week shall be given at each centre.

A salary of £60 per annum may be allowed when the teacher is employed for thirty hours, or upwards, per week.

### *Conditions Under Which the Classes will be Held.*

(1) A local Committee to be formed, who shall make known the objects of the instruction, obtain a suitable class-room, and be responsible for the proper cleaning and lighting of the room.

(2) All changes in the Time Table of the Classes to be at once notified to the Committee.

(3) An accurate account of all receipts and expenditure to be kept for each class in the books provided for the purpose by the Department.

(4) A deduction of one penny per shilling to be made from the sale price of all articles. (The amounts so raised will be applied in meeting the cost of rent, fuel, postage, laundering, and incidental expenses, and in forming a fund to be used in paying ready cash for work done.)

(5) Laundering to be paid for at a rate not exceeding 5d. per pound's worth of work washed.

(6) Should the fund referred to at (4) above exceed, at the close of any academic year, one-tenth of that year's sales, a bonus may be granted out of the excess to each worker, at a rate of not more than 6d. per £ of the wages paid in the case of lace and crochet-workers, and 8d. per £ in the case of spriggers. (This bonus will only be paid after the accounts have been audited by the Secretary to the County Committee, and on his certificate that the position of the industry warrants such payment.)

(7) Any balance of the excess which may remain after providing for the above purposes to be returned to the County Committee.

## III. INSTRUCTION IN DOMESTIC ECONOMY SUBJECTS AND MANUAL TRAINING.

The Committee will appoint an instructress in Domestic Economy Subjects and Hygiene, and an instructor in manual training (woodwork), who shall conduct courses of instruction in these subjects at centres and at times to be fixed by the Committee, with the approval of the Department.

These courses will consist of at least thirty lessons of two hours' duration each, and will extend over a period of about six weeks. A fee not exceeding 2s. 6d. will be charged for admission to each class.

## IV. TRAINING SCHOOL FOR LACE TEACHERS.

A school for the training of skilled workers as teachers of lace and sprigging classes will be conducted in connection with the Technical School, Enniskillen. Instruction will be provided in lace-making, or sprigging, laundering, drawing and design, English, commercial arithmetic, business procedure, and hygiene.

Classes will be held daily under the supervision of a principal holding special qualifications.

Students, while in attendance at the school must continue to practise their industry.

Candidates for entrance must pass an examination in English, arithmetic, drawing, and lace-making or sprigging.

Recognition of qualifications to give instruction in lace-making or sprigging will be accorded to those students only who attend satisfactorily

during one complete session of twelve months, and who reach a satisfactory standard in an examination which will be held by the Department.

#### V. GENERAL CONDITIONS.

(See Scheme for County Cork.)

### COUNTY KILKENNY.

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

The Scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban District of Kilkenny and to all the rural districts within the administrative area of the County Council.

Population of the County :—Urban District, 10,600; Rural Districts, 68,550; total, 79,159.

Valuation of the County :—Urban District, £19,532; Rural Districts, £344,369; total, £363,921.

Valuation of 1d. rate :—Urban District, £81; Rural Districts, £1,434; total, £1,515.

The local contributions from the rates will be paid over to the Committee as follows :—County Council's contribution, in instalments in July and October, 1910, and January and April, 1911; Urban District Council's contribution, two-thirds on the 1st October, 1910, and the remainder on the 1st March, 1911.

#### Technical Instruction Committee.

The Committee is a Joint Committee of the Kilkenny County Council and the Urban District Council of Kilkenny. It consists of thirty-one members, of whom seventeen are councillors, and fourteen added members.

#### Chief Industries.

The most important industries (excluding agriculture and allied industries) are building trades, woollen cloth manufacture, engineering, cycle-making, furniture making, tobacco curing, marble and slate quarrying and working, monumental carving, printing and book-binding, milling, foundry-work, brewing, coopers, weaving, baking, cabinet-making, boat-making, coal-mining, distilling, tanning.

#### Objects of the Scheme.

The objects of the Scheme are to provide, mainly by classes in Evening Technical Schools and in the Day Trades Preparatory School, by scholarships, and by the employment of itinerant teachers, instruction in technological, science and art, commercial, industrial, and domestic economy subjects.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Subjects of Instruction.
- III. Teaching Staff.
- IV. Day Trades Preparatory School.
- V. Itinerant Instruction.
- VI. Scholarships for Boys.
- VII. Evening Technical Classes.
- VIII. General conditions.

## I. FINANCE.

A. <i>Estimated Income.</i>		£
(1) Contribution from the County Council from rates levied over the Rural Districts in the financial year ending 31st March, 1911	...	540
(2) Contribution from the Urban District Council of Kilkenny (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911)	...	80
(3) Contributions from the Department :—		
(a) Annual Grant from Endowment	...	2520
(b) Special Grant towards the maintenance of the Day Trades Preparatory School (estimated)	...	2420
(c) Grants for instruction in Science, Art, etc.	...	2150
(d) Grant in aid of the Scholarship Fund	...	450
(4) Students' Fees, and Sale of Books, Class Materials, etc.	...	1,460
(5) From the Managers of Day Secondary Schools for the part services of the Art Master	...	80
Total	...	42,200
B. <i>Estimated Expenditure.</i>		£
(1) Salaries of Teachers :—		
(a) Principal and Secretary	...	260
(b) Permanent Teaching Staff	...	965
(c) Increase of Salaries of Permanent Teachers (estimated)	...	30
(d) Temporary Teaching Staff	...	80
(2) Travelling Expenses and Allowances	...	100
(3) Scholarships for Boys	...	188
(4) Prizes	...	60
(5) Maintenance of Classes at Temporary Centres, including rent of rooms, cost of supplies, removal of equipment, etc.	...	150
(6) Maintenance of Classes in the Urban District of Kilkenny, including rent of premises, insurance, caretaker's wages, heating, lighting etc.	...	220
(7) Equipment	...	37
(8) Administration, including cost of Clerical Assistance, Office Expenses, Printing, Stationery, and Advertising	...	80
Total	...	42,200

## II. SUBJECTS OF INSTRUCTION.

## (1) IN EVENING CLASSES.

*Preparatory Course.*

English, elementary mathematics, drawing, manual instruction (woodwork).

*Commercial Subjects.*

Shorthand.

*Science (Pure and Applied).*

Building construction and drawing, machine construction and drawing, physics, chemistry, tailors' cutting, carpentry and joinery.

*Handicraft.*

Manual instruction in wood and metal.

*Domestic Science.*

Cookery, housewifery, laundry-work, dressmaking, home-sewing, sick-nursing, hygiene.

*Art Subjects.*

Freehand, object, model, and blackboard drawing, drawing in light and shade, design, geometrical drawing, painting of ornament in monochrome.

(2) *AT TEMPORARY CENTRES.*

The subjects taught will mainly be those mentioned in Section V., but such of the subjects above-mentioned as may be suitable to a particular locality may be added from time to time.

(3) *IN THE DAY TRADES PREPARATORY SCHOOL.*

Experimental science and drawing, workshop mathematics, manual instruction in wood and metal, practical geometry, and literary subjects, including one modern language in addition to English.

III. *TEACHING STAFF.*

The teaching staff will comprise permanent and temporary officers.

The permanent staff will consist of :—

## 1. A principal, whose duties shall be :—

- (a) To act as Secretary to the Committee.
- (b) To give effect generally to the provisions of the approved scheme in accordance with the instructions of the Committee.
- (c) To supervise the work of the teaching staff.
- (d) To conduct day and evening classes as may be found necessary.

## 2. A teacher of experimental science, mathematics, etc., with special qualifications in mechanical science.

## 3. A teacher of art subjects, whose services will be partly utilised in conducting day classes in certain secondary schools.

## 4. Two manual instructors.

## 5. A teacher of English, Mathematics and French.

## 6. Three itinerant instructresses in domestic economy. The services of these instructresses shall be available in Kilkenny Urban District and other centres as may be arranged. (They will be entirely engaged in conducting courses of instruction in temporary centres between the close of one evening school session and the opening of the next.)

The temporary staff will consist of teachers, specially qualified to give instruction in technical and commercial subjects, whose engagements shall be subject to such conditions as may be arranged at the time of making each appointment.

It will be a condition of all appointments on the permanent teaching staff under this scheme that the teachers will be prepared to give instruction in rural centres, and in both day and evening classes, when required to do so by the Committee, and that they shall be under the control of the principal.

IV. *DAY TRADES PREPARATORY SCHOOL.*

The Day Trades Preparatory School is conducted at the City Technical School, Kilkenny. The aim of this school is to provide for boys over thirteen years of age, who have received an education equivalent to that of the sixth standard of a National School, such a course of training as will fit them to enter upon an industrial career.

The course of instruction will extend over three years.

The standard of education of candidates for admission to the school will be tested by means of an entrance examination, conducted under conditions approved of by the Department.

The Department will bear three-fourths of the approved net annual cost of maintaining the school. The proportion of the expenditure admitted for payment by the Department may be increased by one-tenth if the Department, after consideration of their inspectors' reports, are of opinion that the organisation and teaching justify such a course, or it may be reduced by one or more tenths if the organisation or teaching is considered unsatisfactory.

A sum of £30, included in the amount allocated for prizes, is reserved for pupils who have completed satisfactory courses at the Day Trades Preparatory School, and will be distributed as follows:—

Three prizes of the value of £10 each may be awarded to the students who have most satisfactorily completed a course extending over three years.

The prizes will be awarded by the Committee to the most deserving students, having regard to the report made by the Principal in each case.

Should sufficient merit, in the opinion of the Committee, not be shown, any or all of the prizes may be withheld.

The first moiety of the prize in each case shall be payable on the production of satisfactory evidence that the student has entered upon an apprenticeship, or taken up industrial employment approved by the Committee, and that satisfactory provision has been made for his receiving further instruction in evening classes.

The second moiety shall be payable six months later, on the production of evidence of satisfactory progress on the part of the student.

#### V. ITINERANT INSTRUCTION.

The subjects to be taught will include manual work in wood, technical drawing, building construction, cookery, laundry-work, needlework (including repairing, plain sewing, and dressmaking), hygiene, housewifery, etc. The teachers will continue to give short courses of instruction in centres where suitable arrangements for the accommodation of the classes can be made. Classes may be held for both day and evening students at each centre, and the instruction will be adapted to the needs of the locality, and will be as practical in character as possible. The short courses will be organised so as to allow a teacher to devote thirty days to instruction at each centre, and, when expedient, to work two centres concurrently. In temporary centres a course of instruction in practical cookery and housewifery or manual instruction shall consist of thirty two-hour lessons, one in laundry-work of twelve, and one in needlework of at least eighteen such lessons. A time-table and itinerary, to show the proposed distribution of the time of the itinerant teachers for the session, will be prepared as soon as possible after the date fixed for the return of the forms of application from the different centres in the county.

#### VI. SCHOLARSHIPS FOR BOYS.

Provision is made for the award of scholarships to boys attending primary schools. The object of these scholarships is to aid promising boys, who have already received a satisfactory primary education, to attend, at the Kilsenny Day Trades Preparatory School, a course of instruction specially designed to fit them to enter upon an industrial career.

These scholarships entitle the holders to free tuition and the free use of text books, tools, etc., at the Day Trades Preparatory School, and, in a certain number of cases, to a maintenance allowance, the amount of which will vary with the distance of the residence of the boy from the Day Trades Preparatory School.

There will be five classes of scholarships:—

Class A.—Five scholarships of £12 each, tenable only by boys whose homes are outside a radius of eight miles from the Day Trades Preparatory School. These scholarships will be competed for as follows:—



One by boys from the eligible portions of the Baronies of Ewerk, Ida, and Knocktopher.

One by boys from the eligible portions of the Baronies of Cullam, Kella, and Shillbogh.

One by boys from the eligible portions of the Barony of Gowran.

One by boys from the eligible portions of the Barony of Fassadinia.

One by boys from the eligible portions of the Baronies of Galmsay and Crannagh.

Class B.—Seven scholarships of £8 each, tenable by boys whose homes are outside a radius of four miles from the Day Trades Preparatory School.

Class C.—Twelve scholarships of £4 each, tenable only by boys whose homes are outside a radius of two miles from the Day Trades Preparatory School, or who have already held a scholarship under Class D. or Class E. for two years.

Class D.—Eight scholarships of £8 each for first year scholars who reside within a radius of two miles from the Day Trades Preparatory School.

Class E.—Sixteen free places without maintenance allowance.

Should no eligible candidate qualify for a scholarship attached to any district mentioned under Class A., or should an insufficient number of eligible candidates qualify for the scholarships under Classes B. and C., the Committee may award the unallocated scholarships to other qualified candidates in order of merit; but in such cases the scholarships will be held for one year only, and the holders will not be entitled to special consideration in the following year.

The scholarships are tenable for one year, but if the scholar's attendance and conduct are satisfactory, may be renewed from year to year throughout the course.

Information as to the number and value of the scholarships to be offered for competition may be obtained, early in May, upon application to the Secretary to the Committee.

*General Conditions regulating the Award and Retention of Scholarships.*

(1) Scholarship-holders will be required to begin attendance at the Day Trades Preparatory School at the beginning of the school year, and in no case later than the 1st October.

(2) The amount of the scholarship will be paid in instalments to the parents or guardians of the scholar on or about the 15th October, 15th January, 15th April, and 15th July. The second and subsequent instalments will be paid only after satisfactory reports of attendance and progress have been received from the principal of the school.

(3) The Committee may, at any time, subject to the approval of the Department, determine a scholarship, without notice, upon being satisfied that its continuance is for any reason undesirable.

(4) In the case of difficulties arising in connection with the awarding or holding of these scholarships, the matter will be referred to the Department, whose decision shall be final.

*Examination for Scholarships, June, 1911.*

(5) The Examination will be held by the Department of Agriculture and Technical Instruction, on the 22nd of June, 1911, at centres which will be fixed when all the applications have been received. The subjects and time-table of the examinations will be:—

*Arithmetic.*—Thursday, June 22nd, 11 a.m. to 12.30 p.m.

*English.*—Thursday, June 22nd, 1 p.m. to 2.15 p.m.

*Drawing.*—Thursday, June 22nd, 2.30 p.m. to 3.30 p.m.

(The Syllabus of Examination are given in the County Tipperary (North Riding) Scheme below).

Candidates may be examined on any part of these Syllabuses.

One hundred marks will be assigned for Arithmetic, one hundred for English, and fifty for Drawing.

(6) Only those candidates will be eligible for admission to the examination :—

(a) Who will be over twelve and under fifteen years of age on the 1st August, 1911;

(b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st June, 1911.

(7) Forms of application for admission to the examination may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 3rd June.

(8) Successful candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(9) The Committee may refuse to award the full number of scholarships offered for competition should a sufficient number of qualified candidates not show sufficient merit.

Early in the Academic Year, 1910-11, copies of the Scholarship Scheme shall be sent to all Schools eligible to present candidates, situated within the area administered by the Committee, and an advertisement of the Scheme and of the number of Scholarships to be competed for in June, shall be inserted once during the month of May in the newspapers circulating within this area.

#### VII. EVENING TECHNICAL CLASSES.

The Committee will, in addition to maintaining the Kilkenny City Technical School, establish, or aid in establishing, so far as the funds at their disposal permit, evening technical classes in places to be previously approved of by the Committee and the Department :—

(a) By acquiring or giving aid towards acquiring, class rooms.

(b) By making arrangements, so far as possible, to allow the Instructors employed by the Committee to conduct the classes in subjects specially suited to the needs of the locality.

#### VIII. GENERAL CONDITIONS.

(See Scheme for County Cork.)

### COUNTY TIPPERARY (NORTH RIDING).

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

The scheme, subject to the provisions requiring local contributions from the rates, is applicable to the Urban Districts of Nenagh, Taurine, and Templemore, and to the Rural Districts within the administrative area of the County Council.

Population of the area administered under the scheme :—Urban Districts, 11,889; Rural Districts, 55,920; total, 67,815.

Valuation of the area administered under the scheme:—Urban Districts, £20,482; Rural Districts, £296,769; total, £277,211.

Value of Id. rate:—Urban Districts, £85; Rural Districts, £1,070; total, £1,155.

The local contributions from the rates (Urban and County) will be paid over to the Committee in instalments on or about the first day of each quarter.

#### *Technical Instruction Committee.*

The Committee is a Joint Committee of the Tipperary (North Riding) County Council, and the Urban District Councils of Nenagh, Thurles, and Templemore. It consists of twenty-five members, of whom twelve are selected by the County Council, five each by the Urban District Councils of Nenagh and Thurles, and three by the Urban District Council of Templemore.

#### *Chief Industries.*

The population of the district served by the scheme is almost entirely devoted to agriculture and allied industries.

#### *Object of the Scheme.*

The object of the scheme is to provide, mainly by evening schools and itinerant classes, instruction in science, art, technological, and domestic economy subjects, chiefly for persons engaged in various industries during the day.

The scheme is set out under the following heads:—

- I. Finance.
- II. Evening Schools.
- III. Manual Instruction.
- IV. Domestic Economy Instruction.
- V. Technical and Apprentice Scholarships for Boys.
- VI. Grants to Industrial Classes.
- VII. Scholarships for Girls.
- VIII. General Conditions.

#### I. FINANCE.

A. Estimated Income:		£
(1) Contribution from the County Council from rates levied over the Rural Districts in the Financial Year ending 31st March, 1911	...	249
(2) Contributions from the Urban District Councils of Nenagh, Templemore and Thurles (the produce of a rate of 1d. in the £ levied in the Financial Year ending 31st March, 1911)	...	75
(3) Contributions from the Department:		
(a) From Endowment	...	£200
(b) For instruction in Science, Art, etc.	...	£150
(c) Grant in aid of the Scholarship Fund	...	£20
		800
(4) Grant from the Tipperary (N.R.) Committee of Agriculture in respect of scholarships for girls tenable at the Dundrum Residential School of Domestic Training	...	80
(5) Students' Fees, Sales of Materials, and incidental receipts	...	25
Total	...	<u>£1,289</u>

B. *Estimated Expenditure:*

	£
(1) Salary of Principal .....	150
(2) Salaries of other teachers .....	435
(3) Travelling expenses and maintenance allowance of Principal and other teachers .....	100
(4) Grants towards salaries of teachers of Industries Classes ..	105
(5) Dundrum Residential School of Domestic Training:—	
(a) Four Scholarships of £15 each .....	£60
(b) Allowance in respect of expert instruction for Scholarship-holders, at £5 per scholar .....	£20
(6) Scholarships for Boys .....	80
(7) Class expenses, including rents of premises, heating, lighting, cleaning, cost of materials, and cost of removal of equipment .....	100
(8) Prize fund for the Roscrea Technical School .....	200
(9) Office expenses, printing, stationery, advertising, etc., and incidental expenses .....	10
	60
<b>Total</b> .....	<b>£1,240</b>

## II. EVENING SCHOOLS.

(See Section II. of the County Cork Scheme.)

## III. MANUAL INSTRUCTION.

The manual instructor will conduct classes in woodwork in the day secondary schools, for not more than six hours per week, at Nenagh and Thurles, and evening classes at Nenagh, Thurles, Roscrea, and Templemore. In return for the day instruction given at the Christian Brothers' Schools, the Christian Brothers will lend the manual workshop, free of rent, to the Committee for evening classes; but the cost of materials, lighting, advertising, and heating, incurred in connection with these classes, will be paid by the Committee.

The manual instructor will not be allowed to give instruction other than that arranged for under the Scheme, without the written permission of the Committee.

## IV. DOMESTIC ECONOMY INSTRUCTION.

The Committee will arrange for each of the two Itinerant Instructresses to visit seven centres in the course of the year. One teacher will be allocated to the east, and the other to the west of the county. The centres to be visited, and the order in which they are to be taken, will be fixed by the Committee at the beginning of the academic year.

## V. TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS FOR BOYS.

(1) Scholarships for Boys are awarded on the results of a competitive examination held annually. Boys who, during the preceding School Year, have been in regular attendance at one of the following schools will be eligible to compete, viz.:—

- (i.) Primary Schools (only boys who have completed the course of the Sixth Standard of the National School Programme, or its equivalent, will be eligible to compete).
- (ii.) Elementary Evening Schools conducted under the Rules and Regulations of the Commissioners of National Education.
- (iii.) The Preparatory Course of Evening Technical Schools.

(2) The Scholarships will be of two kinds:—(a) Technical Scholarships, and (b) Apprenticeship Scholarships.

## (A)—TECHNICAL SCHOLARSHIPS.

*(Tenable only by Boys who shall have attained the age of 13 years on the 1st day of August in the year of examination.)*

These Scholarships are tenable at (1) approved Day Technical Schools, (2) approved Day Trades Preparatory Schools, or (3) other Schools, the main object of which is the instruction of pupils of an industrial type, and which may provide a course, exclusively followed by the pupils attending it, equivalent to that of a Day Trades Preparatory School. The choice of the school will remain with the winner of the Scholarship or his parent (or guardian) subject to the approval of the Department.

There will be three classes of Technical Scholarships:—

- (i.) Scholarships of the value of £5, tenable at schools within a radius of five miles from the home of the Scholar;
- (ii.) Scholarships of the value of £10, tenable at schools outside a radius of five miles from the home of the Scholar; Scholarships of this value are only awarded where there is no approved school of the type selected within a radius of five miles.
- (iii.) Scholarships of the value of £20 to be granted to Scholars whose attendance at an approved school will necessitate residence away from his home.

Scholars will be required to be in attendance at the school selected at the beginning of the School Year, and in any case not later than the 1st of October. The amount of the Scholarship will be paid in instalments to the parents or guardians of the scholar on or about the 15th October, 15th January, 15th April, and 15th July. The second and subsequent instalments will be paid only after satisfactory reports of attendance and progress have been received from the school authorities.

Scholarships will be tenable for one year, but may be renewed for a second and third year on the recommendation of the Department's Inspector.

Holders of these Scholarships will be eligible after attaining the age of sixteen years, for election without further examination by the Committee, on the recommendation of the Department, to an Apprenticeship Scholarship.

## (B)—APPRENTICESHIP SCHOLARSHIPS

*(Tenable only by Boys who have attained the age of 16 years.)*

These Scholarships are tenable during the period of apprenticeship to an approved trade extending over a period of five years. They may be awarded on the result of the annual Examination for Technical and Apprenticeship Scholarships, or in accordance with the terms of the preceding paragraph.

The choice of the trade to be followed will remain with the winner of the scholarship, subject to the approval of the Department.

It will be a condition of tenure that the holder shall be duly indentured to a firm recognised by the Department for the purpose of these Scholarships, and under conditions which have been approved by them. The more important of these conditions are shown below.

It will also be a condition of tenure that the holder shall follow an approved course of study in an Evening Technical School or a Special Course of instruction for Apprentices organised under the Department's Programme for Technical Schools and Science and Art Schools and Classes, and Scholars must submit, for the approval of the Department, a timetable of their proposed courses of study under these conditions. Scholars will be required to begin attendance at the approved course of study at the same time that they are admitted to apprenticeship.

Apprenticeship Scholarships are intended to provide a maintenance allowance during the period of Apprenticeship, and their value for the period may be estimated at about £100. This will be paid in such sums as, together with the weekly wages paid by the employer, will amount to not less than 15s. per week throughout the period of Apprenticeship. As the

rate of wages paid an apprentice commonly increases throughout the period of Apprenticeship, beginning at a small sum in the first year, the amount to be provided by the Committee for the Scholarship will decrease in proportion.

The amount will be payable in such instalments as may be approved by the Department, regard being had to the special circumstances of each case.

Where an Apprenticeship premium is payable, the Department will be prepared, in approved cases, to provide for its payment.

(3) The Committee may, at any time, subject to the approval of the Department, determine a Scholarship, without notice, upon being satisfied that its continuance is, for any reason, undesirable.

(4) In the case of difficulties arising in connection with the award or retention of these Scholarships, the matter will be referred to the Department, whose decision shall be final.

#### CONDITIONS REGULATING THE DEPARTMENT'S RECOGNITION OF INDENTURES.

(5) In selecting firms with whom Scholars may be apprenticed, the Department will arrange that the following conditions shall be observed :—

- (i.) Satisfactory arrangements to be made whereby the Apprentice Scholar will have an opportunity of learning all the various branches of their trade.
- (ii.) In centres where provision is made for suitable Day Classes, Apprentice Scholars to be permitted to attend during working hours such classes as the Department may approve, the total number of hours so allowed not to exceed an average of eight hours weekly. The Apprentice Scholars to be paid for the time spent at these classes, but the total number of hours worked, including the hours of attendance at classes, shall not exceed that recognised in the particular trade as constituting a week's work.
- (iii.) Where suitable Day Classes are not available, facilities to be given to Apprentice Scholars to attend a course of instruction in Evening Technical Schools or Classes, the working hours to be reduced by an equivalent number of hours, such reduction not to exceed a total of eight hours per week.
- (iv.) The authorities of the school or classes which the Apprentice Scholar attends shall certify as to the number of hours during which the Scholar was present at the class each week, and on the production of such certificate, the Scholar shall be paid by the employer for the hours mentioned in the certificate.
- (v.) The Department's Inspectors shall be entitled to visit the various places where the apprentices are employed at any time during working hours, and inquire into grievances or complaints that may be made either by the employer or the Apprentice Scholar.
- (vi.) The Department shall have power to cancel the Indenture and to terminate the Scholarship should the Apprentice prove unsatisfactory, or to transfer the Apprentice to another firm if for any reason it appears desirable to them to do so.

#### EXAMINATION FOR TECHNICAL AND APPRENTICESHIP SCHOLARSHIPS, JUNE, 1911.

(6) The Examination will be held by the Department of Agriculture and Technical Instruction, on the 22nd of June, 1911, at centres which will be fixed when all the applications have been received. The subjects and timetable of the examinations will be :—

*Arithmetic*.—Thursday, June 22nd, 11 a.m. to 12.30 p.m.

The principles of Vulgar and Decimal Fractions, with examples involving addition, subtraction, and multiplication.

Proportion, Simple Interest, Practice, Unitary Method.

The Metric System.

Methods of Weighing and Measurement.

Measurement of lengths, areas, and volumes.

**English.**—Thursday, June 22nd, 1 p.m. to 2.15 p.m.

**Composition:** A short essay or letter, of thirty or forty lines—with correct spelling, grammar, and punctuation—on some familiar subject.

**Ability to answer, in fully-formed sentences, questions on the meaning of words and phrases, and on the matter of a passage read.**

**Grammar:** The construction of words; prefixes, affixes, and roots.

**Analysis of simple and complex sentences.**

**Correction of faulty sentences.**

**Paraphrasing a short poetical extract.**

**Drawing.**—Thursday, June 22nd, 2.30 p.m. to 3.30 p.m.

1. Freehand Drawing.

2. Simple exercises in Design.

3. Model Drawing of Simple Common Objects.

4. Simple Geometrical Drawing.

*And, in cases in which Committees decide that the examinations shall include Irish or Mathematics:—*

**Irish.**—Thursday, June 22nd, 3.45 p.m. to 5.15 p.m.

1. *An Turbá Breac, Teallay Gábhán* : with questions on grammar, etc., arising out of the text.

2. A passage, or passages, from some other Irish text or texts for translation into English.

3. Short sentences, colloquial phrases, and a short passage for translation from English into Irish.

**Mathematics.**—Thursday, June 22nd, 3.45 p.m. to 5.15 p.m.

**Algebra.**—Problems involving simple and simultaneous equations, fractions, factors, and square root.

**Euclid.** Book I, with practical exercises on the problems.

**Practical Geometry.** Measurement of rectilinear figures from diagrams drawn to scale.

Pupils will be required to draw and measure simple geometrical figures accurately.

Candidates may be examined on any part of these Syllabuses.

One hundred marks will be assigned for Arithmetic, one hundred for English, fifty for Drawing, and fifty for Irish or Mathematics.

(7) Only those candidates will be eligible for admission to the examination:

(a) Who will be over thirteen and under sixteen years of age on the 1st August, 1911;

(b) Whose parents or guardians have been resident in the area administered by the Technical Instruction Committee for at least one year immediately preceding the 1st June, 1911.

(8) Forms of application for admission to the examination may be obtained from the Secretary to the Committee, and must be returned, duly filled in, by the 2nd June.

(9) Successful candidates will be required to furnish, for the inspection of the Technical Instruction Committee, an authenticated copy of certificate of birth, and a certificate of sound health from a duly qualified medical practitioner.

(10) The Committee may refuse to award the full number of Scholarships offered for competition should a sufficient number of qualified candidates not show sufficient merit.

Early in the Academic Year, 1910-11, copies of the Scholarship Scheme shall be sent to all Schools eligible to present candidates, situated within the area administered by the Committee, and an advertisement of the Scheme and of the number of Scholarships to be competed for in June, shall be inserted once during the month of May in the newspapers circulating within this area.

## VI. GRANTS TO INDUSTRIAL CLASSES.

Grants of £35 each may be made to the Managers of the Presentation Convent, Thurles, the Convent of the Sacred Heart, Roscrea, and the Convent of Mercy, Nenagh, towards the salary of the teacher of the Home Industries Classes at each of these Schools. These grants will be payable monthly, and will be liable to be discontinued at any time upon receipt of an unfavourable report from the Department's Inspectors upon the working of the classes.

## VII. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1911, award four Scholarships to girls who have received a satisfactory primary education, to enable them to attend a regular course of instruction and training in Domestic Economy. The object of these Scholarships is to cultivate intelligence, thrift, and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at the Dundrum Residential School, or other Residential Schools of Domestic Training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the Managers of the School on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the School Managers, will entitle the scholar to board, residence, and training for one academic year.

(*For General Conditions regulating the Award of the Scholarships and Conditions regulating the Recognition of Residential Schools of Domestic Training, see the County Cork Scheme.*)

## VIII. GENERAL CONDITIONS.

(*See County Cork Scheme.*)

## COUNTY ROSCOMMON.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

The Scheme, subject to the provisions requiring local contributions from rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the County, 101,791. Valuation, £301,926. Value of 1d. rate, £1,258.

The local contributions from rates will be paid over to the Committee by the County Council in instalments in September and December, 1910.

*Committee of Agriculture and Technical Instruction.*

The Committee was appointed on the 16th June, 1908, and will cease to hold office on the 16th June, 1911. It consists of fifty-eight members, of whom thirty are County Councillors and twenty-eight added members.

*Chief Industries.*

Agriculture and allied industries, coal-mining, and clay-pipe manufacturing.

*Objects of the Scheme.*

The objects of the Scheme are to provide, mainly by means of itinerant instructors, instruction in technological, industrial, and domestic economy subjects.



The Scheme is set out under the following heads :—

- I. Finance.
- II. Itinerant Instruction.
- III. Instruction in Industries.
- IV. General Conditions.

#### I. FINANCE.

<b>A. Estimated Income.</b>	£
(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1911 ...	300
(2) Contributions from the Department's Endowment ...	450
<b>Total</b> ...	<b>£750</b>
<b>B. Estimated Expenditure.</b>	£
(1) Salaries of two Instructors in Manual Work ...	255
(2) Salaries of two Instructresses in Domestic Economy ...	165
(3) Travelling Expenses of Itinerant Teachers, and Expenses of Classes conducted by them, including Cost of Supplies, Rent of Rooms, and Cost of Removal of Equipment, &c. ...	147
(4) Increases of Salaries of Itinerant Teachers (estimated) ...	10
(5) Salary of one Teacher of Crochet-Work ...	62
(6) Expenses in connection with the Teaching of Crochet Work ...	31
(7) General Administration Account ...	90
<b>Total</b> ...	<b>£750</b>

#### C. Allocation of Accumulated Funds.

Any funds remaining unexpended from the working of the Scheme in previous sessions will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

#### II. ITINERANT INSTRUCTION.

Two manual instructors and two teachers of domestic economy will be employed throughout the session. The following are the general conditions in regard to their employment :—

- (a) They shall be under the control of the Committee, and shall receive their instructions through the Secretary of the Committee.
- (b) In centres where a course of instruction is being provided for the first time, the instructor or instructress will be required to pay a preliminary visit, at least a fortnight before the opening of the classes, in order to see that the proposed accommodation is suitable, and to confer with the local Committee with regard to arrangements for the course.
- (c) The itinerant teachers will, as a rule, be expected to give not less than four hours' actual teaching five days each week.
- (d) The Committee will submit to the Department at the beginning of the session a time-table and itinerary showing the proposed distribution of the time of the itinerant teachers for the season. This general time-table and itinerary will be arranged at a Committee meeting held after the date fixed for the return of the forms of application from the different centres in the county.
- (e) The course in domestic economy will, as a rule, be of six weeks' duration, lessons being given each day, but where it can conveniently be arranged, two courses may run concurrently. In this case the duration of the course will be three months, half the time in each week being devoted to one centre, and half to the other. The same rule will in general apply to the courses in manual instruction, except that three months shall be the ordinary duration of a course in any centre.
- (f) The salaries of itinerant teachers are payable monthly.

## III. INSTRUCTION IN INDUSTRIES.

Provision is made for the employment of a teacher of crochet-work. The services of this teacher will be available at any centres in the county which may be selected by the Committee, and will be retained for a period of not less than twelve months at each centre. Instruction will be discontinued at any centre at which a satisfactory attendance of pupils is not maintained.

## IV. GENERAL CONDITIONS

(See County Clerk Scheme.)

## COUNTY WESTMEATH.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

The Scheme, subject to the provision requiring a local contribution from the rates (see Finance), is applicable to all the Rural Districts within the administrative area of the County Council.

Population of the area administered under the scheme, 55,012. Valuation, £315,283. Value of 1d. rate, £1,314.

The local contribution from the rates will be paid over to the Committee by the County Council in instalments in April and December, 1910.

*County Committee of Agriculture and Technical Instruction.*

The Committee was appointed on the 1st June, 1908, and will cease to hold office on the 1st June, 1911. It consists of sixty-two members, of whom thirty-one are County Councillors and thirty-one added members.

*Chief Industries.*

The chief industries in the rural districts of the County are agriculture and allied industries.

*Objects of the Scheme.*

The objects of the Scheme are to provide, by maintaining a Technical School at Mullingar, and by means of itinerant instructors and scholarships, and by technical classes for girls, instruction in technological, commercial, domestic economy, and industrial subjects.

The Scheme is set out under the following heads :—

- I. Finance.
- II. Itinerant Instruction.
- III. Technical School, Mullingar.
- IV. Technical Classes for Girls.
- V. Scholarships for Girls.
- VI. General Conditions.

## I. FINANCE.

## A. Estimated Income.

	£	s.
(1) Contribution from the County Council from rates levied in the financial year ending 31st March, 1911	...	326 0
(2) Department's contribution from Endowment	...	450 0
Total	...	£776 0

B. Estimated Expenditure.	£	s.
(1) Salary and Travelling Expenses of one Instructor in Manual Work	180	0
(2) Expenses of Classes in Manual Instruction, including cost of Supplies, Rent of Rooms, cost of Removal of Equipment, &c.	20	0
(3) Salaries and Expenses of two Instructresses in Domestic Economy	230	0
(4) Salary of Commercial Instructor	60	0
(5) Technical School, Mullingar:		
(a) Provision for Preparatory Course Classes	625	0
(b) Scholarships	30	0
(c) Heating, Lighting, Class Materials	58	10
	173	10
(6) Grants to Technical Classes for Girls (see note below)	100	0
(7) Scholarships for Girls	200	0
(8) General Administration Account	80	0
Total	2963	10

NOTE: The Committee may, subject to the approval of the Department, apply this sum or any portion thereof, to the direct employment of county teachers of industrial subjects, who may be transferred from district to district, as required.

#### C. Allocation of Accumulated Funds.

Of the funds remaining unexpended from the working of the Scheme in previous sessions, the sum of £187 10s. will be appropriated to meet the estimated deficit on the working of the Scheme for the present academic year; the remainder will be applied for such purposes as the Committee, with the approval of the Department, may, from time to time, determine.

### II. ITINERANT INSTRUCTION.

(a) The subjects to be taught will include manual work in wood, cookery, laundry-work, needlework, and household management, with hygiene (if possible). The courses of instruction in manual work will, as a rule, extend over six weeks, or, where two centres can be taken concurrently, three months. In either case the courses will be so arranged as to secure at least thirty lessons for each of two classes at each centre.

(b) The centres for these courses will be selected by the Committee, on consideration of the applications from all eligible centres, at the beginning of the session.

(c) In the case of courses in Domestic Economy, the Committee will rent a cottage in a populous district, preferably a district containing a number of labourers' cottages. The Instructress will reside in the cottage and conduct classes on certain days weekly for a fixed period—say, ten or twelve weeks. The cottage will be furnished with essentials only and in keeping with the requirements of a cottage of its class. It will be managed so as to show how a household may be conducted on limited resources. The time of the Instructress which is not occupied in classwork at the cottage will be devoted to making house to house visits in the neighbourhood with a view to affording such information of practical subjects as the circumstances of cases may suggest, special attention being given to practical demonstrations in the proper use of such utensils and food materials as are available in the majority of cottages.

The number of students admitted to a class held at the cottage in which the Instructress resides should not exceed eight or ten. The necessary furniture will be hired or purchased by the Committee.

(d) One of the teachers of domestic economy shall be available for the Residential School of Domestic Training at the Convent of Mercy, Meate, so far as to comply with the provisions laid down in Section V. B. (2) of this scheme.

(e) The salaries of itinerant teachers shall be paid monthly, and shall constitute a first charge on the funds of the Committee.

(f) Salaries, allowances, and conditions of employment of itinerant teachers are set forth generally in the Department's Circular Letter, No. 21.

### III. TECHNICAL SCHOOL, MULLINGAR.

The Committee will provide suitable premises for permanent classes at Mullingar. Classes will be conducted in English, elementary mathematics, and elementary drawing of the Preparatory Course; in manual work, practical mathematics, and mechanical drawing; in commercial subjects, and in domestic economy.

The classes will be under the general supervision of the manual instructor as headmaster, and his duties will be :—

1. To conduct classes at Mullingar on two nights in each week, in addition to classes at itinerant centres when not engaged at Mullingar.
2. To take general charge of the registration of students, and the arrangement of time-tables and classes in the Technical School, Mullingar.
3. To be responsible for the equipment of all classes in the Technical School.
4. To furnish monthly reports of the working of the Technical School to the County Committee.
5. To supply, through the Secretary to the County Committee, such information and returns as the Department may, from time to time, require.

A duly qualified teacher in subjects of the Preparatory Course will be engaged by the Committee, and a sum of £25 is provided to defray the teacher's salary and other expenses incidental to the classes.

Classes in commercial subjects will be conducted on two nights each week by a teacher engaged by the Committee.

In order to encourage the attendance of suitable pupils at the Technical School a sum of £30 is provided for the award of Scholarships during the present session as follows :—

#### *Class A. Preparatory Course—Twelve Scholarships of 10s. each.*

These Scholarships will be awarded to the twelve candidates who obtain highest places at the entrance examination in English, Mathematics, and Drawing.

#### *Class B. First Year of Specialization—Six Scholarships of £2 each.*

These Scholarships will be awarded to the six candidates who obtain highest marks at the examination for entrance to Specialized Courses. Three of the Scholarships may be confined to pupils who attended the Preparatory Course satisfactorily.

#### *Class C. Second Year of Specialization—Four Scholarships of £3 each.*

These Scholarships will be awarded to the four candidates who obtain highest marks in any three subjects of a First Year of Specialization.

#### *Conditions.*

- (1) Pupils on the roll of a National School are ineligible for Scholarships.
- (2) The Scholarships will entitle the holders to free tuition at an approved course during the session.
- (3) The amounts of the Scholarships will be paid in three instalments—the first on the enrolment of the scholar, and the subsequent instalments after Christmas and at the end of the session. The second and final instalments will be paid only upon receipt of reports of satisfactory attendance and progress from the Principal.

## IV. TECHNICAL CLASSES FOR GIRLS.

Subject to the conditions set forth below, capitation grants at the rate of £3 per pupil for any number not exceeding ten, and at the rate of £2 per pupil for the remainder of the class, will be paid in respect of the attendance of girls at instruction in lace-making, crochet-making, needlework, sprigging, embroidery, drawn thread work, shirt-making, or such other industrial or domestic subject as may, from time to time, be approved by the Department.

In certain industrial subjects, such as lace-making, a knowledge of drawing is of great value to the worker. Where provision can be made for efficient instruction in drawing, a further grant of 10s. per pupil may be paid in respect of those girls who have qualified for the grant referred to in the foregoing paragraph, and have received not less than forty hours' instruction in Drawing.

(For General Conditions for the Conduct of Classes and Payment of Grants, see the County Cork Scheme.)

## V. SCHOLARSHIPS FOR GIRLS.

The Committee will, in June, 1911, award a limited number of Scholarships to girls who have received an education equivalent to that of the Fifth Standard of a National School, to enable them to attend a regular course of instruction and training in domestic economy. The object of such Scholarships is to cultivate intelligence and resourcefulness on the part of those holding them, and to render them more practical in the performance of home duties of all kinds.

The Scholarships will be of the value of £15 each, and will be tenable at residential schools of domestic training recognised as suitable by the Department of Agriculture and Technical Instruction. Selected candidates will be required to pay a fee of £2 to the managers of the school on or before the date of entrance, and this sum, together with the amount of the Scholarship to be paid by the Committee to the school managers, will entitle the scholar to board, residence, and training for one academic year.

(For the General Conditions regulating the Award of the Scholarships and the Conditions regulating the Recognition of Residential Schools of Domestic Training, see the County Cork Scheme.)

## VI. GENERAL REGULATIONS.

(See the County Cork Scheme.)

## URBAN DISTRICT OF KINGSTOWN.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

## (Chief Industries.

Boat-building, brick-making, and pottery, fishing, painting, carpentry, plumbing, masonry, plasterers' work, horticulture, and commercial pursuits. Population, 17,377. Valuation, £80,760. Value of 1d. rate, £330.

The local contribution from rates will be paid over to the Committee in August, 1910.

## Technical Instruction Committee.

The Committee was appointed in February, 1908, and will cease to hold office in January, 1911. There are nineteen members, of whom ten are Urban District Councillors and nine added members.

*Objects of the Scheme.*

The objects of the Scheme are to provide in day and evening classes instruction in technological, science, art, commercial, and domestic science subjects, and in horticulture.

*Premises.*

The Technical School is situated in Ehlana Avenue, Kingstown, and contains ten class-rooms in addition to stores, offices, and caretaker's apartments, and a manual instruction workshop in the rear of the building. Instruction in horticulture is given in the Committee's garden at Eden Road.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. Studentships and Scholarships.
- IV. General Conditions.

*I. FINANCE.*

<i>A. Estimated Income.</i>	£
(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911) ... ..	300
(2) Students' Fees ... ..	300
(3) Subscriptions and Donations to Scholarship and Prize Fund ... ..	50
(4) Contributions from the Department:—	
(a) Annual Contribution ... ..	£850
(b) Special Contribution for the Session 1910-11, in aid of the equipment of new premises ... ..	200
(c) Grants for instruction in Science, Art, &c., ... ..	400
	<hr/>
(5) Sale of Books, Class Materials, &c. ... ..	1,450
(6) Examination Fees ... ..	90
	<hr/>
<b>Total</b> ... ..	<b>£2,086</b>

<i>B. Estimated Expenditure.</i>	£
(1) Salary of Principal ... ..	350
(2) Salaries of other teachers ... ..	650
(3) Scholarships ... ..	50
(4) Prizes ... ..	40
(5) Caretaker's wages and cost of other labour ... ..	155
(6) Fuel, Light, and Cleaning ... ..	80
(7) Rents and Insurance ... ..	40
(8) Sinking Fund and Interest ... ..	350
(9) Class Materials and Equipment (including provision for new premises) ... ..	250
(10) Administrative and Incidental Expenses:—	
(a) Clerical Assistance ... ..	£45
(b) Printing, Stationery, and Advertising ... ..	60
	<hr/>
(c) Postage ... ..	20
	<hr/>
<b>Total</b> ... ..	<b>£2,100</b>

*NOTE.*—Although the expenditure as estimated above exceeds the income by £14, it is expected that by the exercise of strict economy, any actual deficit on the working of the Scheme will be obviated. Furthermore, it is hoped that the Committee will endeavour, by the same means, to reserve a sum which might be applied in discharge, in part, of the deficit which resulted in the working of the Scheme in 1909-10.

## II. SUBJECTS OF INSTRUCTION.

### *Preparatory Course.*

English, mathematics, science, drawing.

### *Commercial Subjects.*

Shorthand, typewriting, book-keeping, business methods, correspondence, commercial English, commercial arithmetic.

### *Languages.*

Irish, French.

### *Mathematics.*

Mathematics (pure and practical), practical plane and solid geometry.

### *Science (Pure and Applied).*

Building construction, carpentry and joinery, mechanics, chemistry, hygiene, horticulture, and photography.

### *Handicraft.*

Wood-carving.

### *Domestic Science.*

Cookery, laundrywork, dressmaking, hygiene, needlework, housewifery, confectionery.

### *Art Subjects.*

Freehand drawing, model drawing, geometrical drawing, design, modelling, ornamental leather work and marqueterie.

## III. STUDENTSHIPS AND SCHOLARSHIPS.

It is proposed to offer ten Studentships to boys and ten to girls, under the following conditions :—

The students selected must be over fourteen and under sixteen years of age, and must be resident in Kingstown Urban District. They must attend regularly and punctually at the course of instruction arranged for them by the Principal.

Each Studentship will entitle the holder to free tuition in the Technical School for two sessions, and to the free use of the books or tools required in the prescribed courses.

The Committee will pay four Scholarships out of funds provided by Lord Longford and Lord De Vesci. Of these Scholarships two are open to competition, viz. :—

One Scholarship in handicraft of £10 a year, tenable for three years.

One Scholarship in domestic economy of £10 a year, tenable for two years.

## IV. GENERAL CONDITIONS.

(See the County Cork Scheme.)

## URBAN DISTRICT OF PORTADOWN.

## TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

*Chief Industries:* Linen weaving, handkerchief weaving and hem-stitching, building, corn milling, engineering, fruit preserving, brick-making.

Population, 10,692. Valuation, £29,588. Value of 1d. rate, £123.

The local contribution from the rates will be paid over to the Committee in October, 1910, and February, 1911.

*Technical Instruction Committee.*

The Committee was appointed in February, 1908, and will cease to hold office in January, 1911. There are fifteen members, of whom eight are Urban District Councillors, and seven added members.

*Objects of the Scheme.*

The objects of the Scheme are to provide—

- (1) Instruction by means of systematic courses in Science, Art, Technological, Commercial and Domestic Subjects, in Evening Classes, for those engaged in various industries during the day.
- (2) Instruction of a general scientific and technical nature for boys over thirteen years of age in the Day Trades Preparatory School.
- (3) Instruction for apprentices in the sciences and principles underlying their trades by means of a Day School for Apprentices.

*Premises.*

The School is situated in Armagh Road, and contains the following rooms—Lecture rooms, art room, two class-rooms, manual instruction workshop, domestic room, engineering workshop, physical and chemical laboratory (with balance and stove rooms), mechanical laboratory, engine room, dark room, preparations, scullery, offices, etc. The Commercial Classes are held in the Free Library.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. Day Trades Preparatory School.
- IV. General Conditions.

## I. FINANCE.

A. Estimated Income:		£
(1) Contribution from Urban District Council (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911) ... ..	...	110
(2) Students' Fees ... ..	...	100
(3) Donations to Prize Fund ... ..	...	20
(4) Contributions from the Department:—		
(1) From Endowment ... ..	£200	
(2) Grants for instruction in science, art, etc. ... ..	£300	
(3) Grant towards the maintenance of the Day Trades Preparatory School (estimated) ... ..	£400	
		1,200
(5) Sale of books, cookery materials, etc. ... ..	...	20
(6) Fees for instruction in experimental science of pupils from extern schools ... ..	...	12
(7) Grant from National Education Board for instruction in Cookery to National School children ... ..	...	8
Total .. ..		£1,435



B. Estimated Expenditure:				£
(1)	Salary of Principal	...	...	275
(2)	Salaries of other teachers	...	...	680
(3)	Prizes and scholarships (evening school only)	...	...	20
(4)	Scholarships (Day Trades Preparatory School)	...	...	22
(5)	Carpetmaker's wages	...	...	52
(6)	Fuel, light and cleaning	...	...	40
(7)	Rent, rates and insurance	...	...	85
(8)	Equipment (new and renewals)	...	...	50
(9)	Class materials	...	...	30
(10)	Printing, advertising and stationery	...	...	40
(11)	Repairs to premises, grounds, etc.	...	...	5
(12)	Administrative and incidental expenses	...	...	50
(13)	Appropriation to meet the deficit on the working of the Scheme in previous Sessions	...	...	190
Total				£1,475

## II. SUBJECTS OF INSTRUCTION.

### *Preparatory Course:*

English, mathematics, drawing, experimental science, and manual training (woodwork).

### *Commercial Subjects:*

Shorthand, typewriting, business methods and routine, book-keeping, commercial English, commercial correspondence, commercial arithmetic, commercial geography, banking and currency, economics of industry, and commercial law.

### *Languages:*

French and German.

### *Mathematics:*

Practical and pure mathematics, practical plane and solid geometry.

### *Science (Pure and Applied):*

Carpentry and joinery, workshop practice, chemistry, experimental science, applied mechanics, machine construction and drawing, magnetism and electricity, building construction and drawing, steam, mechanical engineering, electrical engineering, textiles, tailors' cutting, elementary science (teachers).

### *Handicraft:*

Manual training (woodwork and metal work).

### *Domestic Science:*

Cookery, laundry-work, housewifery, plain and fancy needlework, dresscutting, dressmaking, renovations.

### *Art Subjects:*

Freshand, blackboard, geometrical and model drawing, drawing in light and shade, drawing of common objects, design, perspective.

## III. DAY TRADES PREPARATORY SCHOOL.

The Day Trades Preparatory School will be conducted at the Technical School, Portadown. The aim of this school will be to provide for boys over the age of thirteen, who have received an education equivalent to that of the Sixth Standard of a National School, such a course of training as will fit them to enter upon an industrial career.

The course of instruction shall extend over a period of three years, and will include experimental science, drawing, workshop mathematics, manual instruction, practical geometry, and literary subjects, including one modern language besides English.

The Department will bear three-fourths of the approved net annual cost of maintaining the school. The proportion of the expenses admitted for payment by the Department may be increased by one-tenth if, in the opinion of the Department's Inspectors, the organisation and teaching merit special recognition, or it may be reduced by one or more tenths if the organisation or teaching is, in the opinion of the Department's Inspectors, unsatisfactory.

#### IV. GENERAL CONDITIONS. (See the County Cork Scheme).

### URBAN DISTRICT OF RATHMINES AND RATHGAR.

#### TECHNICAL INSTRUCTION SCHEME.

1st August, 1910, to 31st July, 1911.

Chief Industries: Commercial pursuits, laundry-work.

Population: 32,002. Valuation, £175,024. Value of 1d. rate, £732.

The local contribution from rates will be paid over to the Committee before the close of the financial year ending 31st March, 1911.

#### Technical Instruction Committee.

The Committee was appointed on the 23rd January, 1908, and will cease to hold office on the 23rd January, 1911. It consists of fifteen members, of whom nine are Urban District Councillors, and six added members.

#### Objects of the Scheme.

The objects of the Scheme are to provide instruction in commercial subjects by means of a School of Commerce, and in Domestic Economy subjects by means of a School of Domestic Training.

#### Premises.

The School of Commerce is situated on Rathmines Road, County Dublin, and contains nine class-rooms.

The Domestic Economy School is situated at Upper Rathmines. Classes are conducted also at premises in Harold's Cross and Miltown.

The Scheme is set out under the following heads:—

- I. Finance.
- II. Subjects of Instruction.
- III. General Conditions.

#### I. FINANCE.

##### A. Estimated Income:

##### 1. SCHOOL OF COMMERCE.

	£
(1) Contribution from the Urban District Council (the produce of a rate of 1d. in the £ levied in the financial year ending 31st March, 1911) ... ..	752
(2) Contributions from the Department:	
(a) From Endowment ... ..	21,000
(b) Grants for instruction in science, art, etc. (estimated) ... ..	2340
(3) Students' Fees ... ..	1,260
(4) Other sources (including unexpended balance from 1909-10) ... ..	200
	55
	<hr/>
	29,251

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## II. SCHOOL OF DOMESTIC ECONOMY.

(1) Department's contribution from endowment ...	£220	
(2) Department's grant for attendance (estimated) ...	£20	
(3) Students' fees and sales ...	£120	
		360
Total ...	£2,641	

## B. Estimated Expenditure:

## I. SCHOOL OF COMMERCE.

(1) Salary of Principal ...	£	404
(2) Salaries of other teachers ...	1,168	
(3) Examinations for school certificates ...	50	
(4) Caretaker's wages ...	52	
(5) Fuel, light and cleaning ...	76	
(6) Rents and Insurance ...	83	
(7) Class materials ...	5	
(8) Equipment, including additions to library ...	215	
(9) Repairs to premises ...	10	
(10) Administrative and incidental expenses:—		
(a) Salary of Secretary ...	£50	
(b) Printing, stationery, and advertising ...	£85	
(c) Clerical assistance ...	£35	
(d) Office expenses ...	£10	
(e) Deputation expenses ...	£10	
(f) Sundries ...	£10	
		200
		£2,251

## II. SCHOOL OF DOMESTIC ECONOMY.

(1) Salary of Chief Instructor ...	£100	
(2) Salaries of assistant teachers ...	£75	
(3) Caretaker's wages ...	£25	
(4) Fuel, light and cleaning ...	£25	
(5) Rent and Insurance ...	£40	
(6) Equipment ...	£10	
(7) Class materials ...	£45	
(8) Printing, stationery and advertising ...	£40	
		390
Total ...	£2,641	

## II. SUBJECTS OF INSTRUCTION.

## (1) SCHOOL OF COMMERCE.

*Preparatory Course.*

English, Arithmetic and Drawing.

*Commercial Subjects.*

Shorthand, typewriting, book-keeping, English correspondence, business methods, commercial arithmetic.

*Languages.*

French, German.

*Mathematics.*

Bankers' arithmetic and algebra.

*Higher Commercial Subjects.*

Advanced book-keeping and accountancy, company procedure and accounts, auditing, mercantile law for accountants, economics, commercial geography, practical banking and finance, merchandise traffic, station accounts, audit office work, coaching traffic, railway signalling and block working, work of railway chief offices, railway economics and geography, railways and the State, building construction in relation to fire hazards, human physiology for insurance students, fire insurance theory and practice, including the law of fire insurance, life assurance theory, practice and law, accident insurance practice and law.

**(3) SCHOOL OF DOMESTIC ECONOMY.**

Cookery, laundry-work, dressmaking and home sewing, household management, hygiene and sick nursing.

**III. GENERAL CONDITIONS.**

(See the County Cook Scheme).

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**CONDITIONS OF AWARD OF SCHOLARSHIPS OFFERED FOR  
COMPETITION BY THE DEPARTMENT.**

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Form S. 2.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERION STREET, DUBLIN.

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**METROPOLITAN SCHOOL OF ART, DUBLIN.**

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**TEACHERSHIPS-IN-TRAINING, 1911.**

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The Department will offer for competition, at the beginning of the Session 1911-12, three Teacherships-in-Training tenable at the Metropolitan School of Art, Dublin. One will be open to competition amongst male candidates only, and one amongst female candidates only; the third will be open to competition amongst both male and female candidates.

The object of the Teacherships-in-Training is to encourage capable Art students to undertake such a course of training as will enable them to become Art Teachers.

The Teacherships-in-Training will entitle the holders to free admission to all the day and evening classes at the Metropolitan School of Art for the Session 1911-12; a maintenance allowance of 21s. per week during the Session (about forty weeks); and third-class railway fare for one journey to and from Dublin.

The Teacherships will be awarded partly as the result of an examination, and partly for works submitted according to the conditions stated below.

The examination will be confined to Art subjects, and will be held at the Metropolitan School of Art, Dublin, on Tuesday, Wednesday, and Thursday, the 27th, 28th, and 29th June, 1911.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Candidates who have held Scholarships at the Metropolitan School of Art extending over more than one School Session will not be eligible for the award of Teacherships-in-Training.

Teacherships will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Metropolitan School of Art, and in particular, candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible. In awarding the Teacherships preference will be given to candidates who possess the Art Class Teachers' Certificate (Board of Education), or the Irish Secondary Teachers' Honours Drawing Certificate.

The award will be made on the following conditions :—

(1.) Candidates must be not less than eighteen and not more than thirty years of age on the 1st September, 1911. The Department may allow a modification of this rule in special cases.

(2.) Successful candidates will be required to furnish a medical certificate of health, an authenticated copy of certificate of birth, and satisfactory testimonials from two responsible persons.

(3.) Candidates must satisfy the Department that they have had a good general education.

(4.) Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st September, 1911.

(5.) Successful candidates will be required to prepare, in conjunction with the Headmaster of the School, a scheme of study; and to submit it for the Department's approval. They will be required to devote their whole time to the work of this scheme; to attend regularly and punctually; and generally to comply with the regulations set out in the programme of the Metropolitan School of Art. They must be prepared, if required, as part of their training, to undertake such work as teachers as the Headmaster may prescribe.

(6.) The Teacherships may be renewed for a second Session. Renewal will depend upon the ability and application shown by the student during the previous Session, and on the scheme of study proposed by the student when applying for a renewal for a second Session.

(7.) The Department reserve the right at any time to determine, without notice, any Teachership upon being satisfied that its continuance is for any reason undesirable.

(8.) The decision of the Department in all questions arising in connection with Teacherships shall be final.

(9.) The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

The names of the candidates must be forwarded, on Form S. 3, so as to reach the Offices of the Department not later than the 29th April, 1911. Applications for forms are not regarded as applications for admission to the examination. Only those candidates who present an official acknowledgment of the form of application will be admitted to the examination room.

Copies of Form S. 3 may be obtained, after 1st February, 1911, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, or to the Registrar, Metropolitan School of Art, Kildare Street, Dublin.

#### SUBJECTS OF EXAMINATION.

The subjects and time-table of the examination will be :—

##### *First Day, Tuesday, June 27th—*

- 10 a.m. to 2 p.m.—Drawing from the Antique. (100 marks.)  
3 to 5.30 p.m.—Model Drawing. (50 marks.)

##### *Second Day, Wednesday, June 28th—*

- 10 a.m. to 1 p.m.—Drawing in Light and Shade from a Cast. (50 marks.)  
2 to 5 p.m.—Drawing, or Modelling, Design. (100 marks.)

##### *Third Day, Thursday, June 29th—*

- 11 a.m. to 1.30 p.m.—Principles of Ornament. (100 marks.)  
2.30 to 4.30 p.m.—Perspective. (50 marks.)  
4.45 to 5.45 p.m.—Drawing on the Blackboard. (50 marks.)

For syllabuses of the subjects of examination, see "Syllabuses and Lists of Apparatus" of the Board of Education, to be obtained (price 4d.), either directly, or through any bookseller, of Mr. E. Pensonby, 116 Grafton Street, Dublin.

## WORKS.

In order to encourage Art students to devote much attention to what should be the primary aim of their higher instruction, namely, the application of their skill, experience, and good taste to works requiring more time and care than the ordinary conditions of an examination room permit, marks, to a maximum of 225, will be awarded for works of the same character as those proposed for the Irish Secondary Teachers' Honours Drawing Certificate. (*See extract below.*)

Works to be submitted for the competition must be delivered at the Metropolitan School of Art, Dublin, on or before Saturday, the 24th June, 1911. They should be addressed, "The Registrar, Metropolitan School of Art, Dublin," and should be specially marked, "Works, Teacherships-in-Training."

*Extract from Circular 16 (Irish Secondary Teachers' Drawing Certificate).*

## WORKS.

(1.) "An imperial sheet of three designs, based on a study in colour of a growing plant. The plant should be drawn from nature simply and directly—not pictorially represented. Such details of the plant as the student may select for the purposes of the designs should, if required, be drawn separately.

"The designs must occupy, in a decorative way, a square, a circle, and an oblong, one being in monochrome, one in two colours, and one in polychrome. At least one of the designs must be executed in body colour or tempera. In each case the plant must be not merely applied to the given space, but treated in accordance with decorative conditions.

(2.) "A modelled study of a flowering plant, with three distinctly different modelled designs for patterns based on it. Each of these three different designs must be suited to the technical requirements of three different processes of manufacture. The process and material for which it is intended must be named on each design. The four studies to be on a panel 30 inches by 22 inches.

- (3.) (a.) "A shaded drawing of a complete human figure from the Antique or from Life; or  
 (b.) "Shaded drawings of a head, hand and foot, from the Life, full size; completely finished in pencil, chalk, or brush in monochrome, or  
 (c.) "A modelled figure in the round, 30 inches high, from the Antique or from Life; or  
 (d.) "A modelled head, from Life, full size."

Form S. 334

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
 UPPER-MERRION STREET, DUBLIN.

## ROYAL COLLEGE OF SCIENCE, DUBLIN.

## SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS, 1911.

A limited number of Scholarships and of Teacherships-in-Training, tenable at the Royal College of Science, Dublin, will be offered for competition among Students of Science and Technology in 1911.

The Scholarships are of the value of £50 per annum and, in addition, entitle the holder to free instruction during the Associate Course, and third-class railway fare for one journey each session to and from Dublin.

A Teachership-in-Training entitles the holder to free instruction during the Associate Course, a maintenance allowance of £15. per week for the session of about forty weeks each year, and third-class railway fare for one journey each session to and from Dublin.

Candidates awarded Teacherships-in-Training will be required to enter into an undertaking that they will pursue the full Associate Course, with a view to becoming Teachers of Science in Ireland, and that, in the event of their leaving the College before obtaining the Diploma of Associateship, they will refund to the Department the sums paid to them as maintenance allowances and expenses of travelling.

The Associate Course extends over three years, and the College Session lasts from the beginning of October until the end of June each year.

Holders of Scholarships and Teacherships-in-Training will be required to devote their whole time to the work of the Associate Course, to comply with the Regulations of the College, and to pass the examinations required for the Associateship. The continuance of the Scholarship or Teachership-in-Training for a second or a third session will depend upon the ability and application which the Student has shown during the previous session or sessions at the College.

Candidates for Scholarships and Teacherships-in-Training must be not less than sixteen nor more than thirty years of age on the 1st June, 1911. Holders of Royal Exhibitions or National Scholarships, and present or past Students of the Royal College of Science, are ineligible as candidates.

Candidates must have been born in Ireland, or have been resident in Ireland for three years prior to the 1st June, 1911.

Candidates will have to satisfy the Department as to their knowledge of English and of one other language (Greek, Latin, Irish, French, or German). In these subjects a pass in the Middle Grade of the Intermediate Education Board's Examinations, in the First Arts Examination of the Royal University of Ireland, or the equivalent of these, will be accepted as satisfactory. Those candidates who cannot thus satisfy the Department as to their knowledge of the qualifying subjects will be examined on the Pass Courses for the Middle Grade of the Intermediate Education Board's Examinations of 1911.

The competition will be confined to Mathematics, Experimental Science and Drawing.

The Syllabus in Mathematics will be the *Honours* Courses in Arithmetic, Geometry, Algebra and Trigonometry for the Senior Grade of the Intermediate Education Board's Examinations of 1911.

In Experimental Science candidates will be allowed the choice of one of the following subjects of the Special Courses of Experimental Science of the Department's Programme for Day Secondary Schools:—Physics, Chemistry, Mechanical Science, Botany, Physiology and Hygiene. The examination may, however, include any of the work of the Two Year Preliminary Course.

The Syllabus in Drawing will be the First and Second Year Syllabuses of the Programme for Day Secondary Schools.

NOTE.—Text Books, other than those referred to in the Syllabuses, are not prescribed for the examinations.

The examination will be held in Dublin on the days and at the hours shown below:—

Tuesday, 27th June.—Mathematics (First Paper), 10 a.m.-1 p.m.; Experimental Science (Written Examination), 2 p.m.-5 p.m.

Wednesday, 28th June.—Mathematics (Second Paper), 10 a.m.-1 p.m.; Experimental Science (Practical Examination), 2 p.m.-5 p.m.

Thursday, 29th June.—Drawing, 11 a.m.-2.10 p.m.; English, 3-5 p.m.

Friday, 30th June.—Greek, Latin, Irish, French or German, 10 a.m.-1 p.m.

Candidates must themselves bear any expenses incurred by them in connection with attendance at the examination.

Scholarships or Teacherships-in-Training will not be awarded to candidates who do not show in the course of the examination that they are capable of taking full advantage of the instruction provided at the Royal College of Science. Candidates with physical defects of voice, sight, or hearing, will not be regarded as eligible for Teacherships-in-Training.

Successful candidates will be required to furnish a Medical Certificate of Health, an authenticated copy of Certificate of Birth, and satisfactory testimonials from two responsible persons.

The Department reserve the right at any time to determine without notice a Scholarship or Teachership-in-Training, upon being satisfied that its continuance is for any reason undesirable.

The decision of the Department in all questions arising in connection with the Scholarships and Teacherships-in-Training shall be final.

The Department do not undertake to employ Teachers, nor to find employment for them, at the close of the period of training.

Applications for admission to the examination must be made not later than the 29th April, on Form S. 24, copies of which may be obtained, after the 1st February, 1911, upon application to the Secretary, Department of Agriculture and Technical Instruction for Ireland, Upper Merrion Street, Dublin, or to the Registrar, Royal College of Science, St. Stephen's Green East, Dublin.

Applications received after the 29th April will be too late for consideration. Applications for Forms are not regarded as applications for admission to the examination. Only those candidates who present an official acceptance of the Form of Application will be admitted to the Examination Room.

*Under Revision.*

Form S. 190.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

#### INDUSTRIAL SCHOLARSHIPS, 1910.

The Department will, in August, 1910, award not more than six Industrial Scholarships to persons engaged in industries, such as the Woollen, Linen, Leather and Tanning industries.

The object of these Scholarships is to enable selected persons, who must already have been engaged in one of the higher branches of the industry, to take a full course of instruction in an institution providing special courses of an approved character, with a view to training them for the management of such an industry. Candidates will be required to show that there is a reasonable expectation of their being able to find suitable employment in the industry in Ireland after the termination of their Scholarships.

The Scholarships will be tenable at some higher institution, to be approved by the Department, in which the industry, and the principles underlying it, are taught. They will be of the value of £80 each, and may be renewed for a second or a third year at the discretion of the Department.

The Scholarship holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st July, 1910.

Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates, or to any other question arising out of these Scholarships, will be final.

Candidates must fill in and return, addressed to the Secretary of the Department, not later than the 30th June, 1910, Form S. 191, copies of which may be had on application.

*Under Revision.*

Form S. 191.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

#### COMMERCIAL SCHOLARSHIPS, 1910.

The Department will, in August, 1910, award not more than six Commercial Scholarships to young men having a sound general education, and some commercial experience.



The object of the Scholarships is to afford facilities for the holders' obtaining training in some higher Institution, approved by the Department, with a view to their employment as teachers of Commercial Subjects in Ireland.

The Scholarships are of the value of £100 each, and are tenable for two years. The Department, however, reserve the right to determine a Scholarship at any time within this period upon being satisfied that its continuance is for any reason undesirable.

The Scholarship holders will be selected by the Department on consideration of the qualifications and experience of the applicants.

Candidates must be at least twenty-one years of age on the 1st July, 1910, and must have been born in Ireland, or have been resident in Ireland for three years immediately preceding the 1st July, 1910.

Successful candidates will be required to enter into an undertaking that they will engage in the teaching of Commercial subjects after the termination of their Scholarships.

Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates, or to any other question arising out of these Scholarships, will be final.

Candidates must fill in and return, addressed to the Secretary of the Department, not later than the 30th June, 1910, Form S. 195, copies of which may be had on application.

*Under Revision.*

Form S. 196.

DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,  
UPPER MERRION STREET, DUBLIN.

#### TRAINING OF TEACHERS OF CROCHET-WORK AND SPRIGGING.

The Department will, in September, 1910, award not more than three Scholarships, tenable at the Training School for Lace and Sprigging Teachers, Enniskillen, to girls having a satisfactory general education, and some proficiency in Crochet-work or Sprigging.

These Scholarships are granted to enable the holders to secure training as teachers of Crochet-work or Sprigging.

The Scholarships will be of the value of £25 each, and will be tenable for one year. The Department reserve the right to determine a Scholarship at any time upon being satisfied that its continuance is for any reason undesirable.

Each candidate for a Scholarship will be required to submit to the Department with the form of application, specimens of her work in either Crochet-work or Sprigging.

Should the work submitted be regarded as of a satisfactory standard, the candidate will be admitted to an examination which will consist of simple tests in English, Arithmetic, Drawing, and Crochet-work or Sprigging.

The Scholarship will be awarded as a result of the examination. (Not more than one Scholarship will be awarded in the case of candidates from any one County.)

The examination will be held at the Metropolitan School of Art, Dublin, and at the Technical School, Enniskillen, on the following dates:—

Dublin: English, Arithmetic and Drawing, on Wednesday, 21st September,

Crochet-work or Sprigging, on Thursday, 22nd September.

Enniskillen: Crochet-work or Sprigging, on Tuesday, 30th September.

English, Arithmetic and Drawing, on Wednesday, 21st September.

Candidates will be required to defray their own expenses in attending the examination.

Candidates must be at least 20 years of age on the 1st September, 1910, and must have been born in Ireland or have resided in the country for three years immediately preceding that date.

Two Certificates of good character will be required from all applicants, and selected candidates will be required to produce a medical certificate of health and an authenticated copy of certificate of birth.

The decision of the Department in regard to the selection of candidates or to any other question arising out of these Scholarships will be final.

Applicants must fill in and return, addressed to the Secretary of the Department, Form S. 197, copies of which may be had on application, together with specimens of work in Crochet or Spooling. (Two specimens of finished work, and two specimens of work in progress should be furnished.)

Only those applications received at the Office of the Department by 12 noon on Monday, September 12th, can be taken into consideration.

## RESULTS OF COMPETITIONS FOR SCHOLARSHIPS OFFERED BY THE DEPARTMENT DURING 1910.

### SCIENCE AND TECHNOLOGICAL SCHOLARSHIPS AND TEACHER- SHIPS-IN-TRAINING.

At the annual examination held on the 28th, 29th and 30th June, 1910, for Science and Technological Scholarships and Teacherships-in-Training, tenable at the Royal College of Science, Dublin, fifty-five candidates presented themselves.

Five Scholarships and five Teacherships-in-Training were open for competition this year, and these were awarded to the following candidates, whose names are given in order of merit:—

#### *Scholarships.*

- Mr. James Nagle, Christian Brothers' Schools, Youghal.
- Mr. Martin Keedy, Christian Brothers' Schools, Cork.
- Mr. Joseph Bradley, Mountjoy School, Dublin.
- Mr. William Campbell Perry, The Academy, Ballymena.
- Mr. Thomas A. Casey, Waterpark College, Waterford.

#### *Teacherships-in-Training.*

- Mr. Denis R. Harte, Christian Brothers' Schools, Cork.
- Mr. Louis Roy Turner, Educational Institution, Dundalk.
- Mr. James J. Smith, City of Dublin Technical Schools, Dublin.
- Mr. John T. Grey, Christian Brothers' Schools, Cork.
- Mr. Bernard O'Neill, Christian Brothers' Schools, Cork.

### INDUSTRIAL SCHOLARSHIPS.

There were twenty-four applicants for the six Industrial Scholarships offered for competition in 1910, but only two were awarded, the successful applicants being:—

- Mr. Charles H. Leland of Drogheda (Linen Manufacture).
- Mr. Henry K. C. Wolf of Conroy, Co. Donegal (Woollen Manufacture).

The following Scholarships in Woollen Manufacture were renewed for the Session 1910-11:—

- Mr. John P. Twohig, awarded in 1908 and renewed in 1909.
- Mr. George S. Hunter, awarded in 1909.
- Mr. Francis H. Crowley, awarded in 1909.

Three of the Scholarships in Woollen Manufacture are being held at the Leeds University, and one at the Central Technical College, Galashiels; the Scholarship in Linen Manufacture is being held at the Municipal School of Technology, Manchester.

## COMMERCIAL SCHOLARSHIPS.

For the Scholarships offered for competition in 1910, there were one hundred and sixteen applicants. Scholarships are being held at the London School of Economics and Political Science (University of London), by the following:—

- Mr. Patrick W. Bryan of Bray, Co. Wicklow.
- Mr. George J. T. Clamptt of Ranelagh, Dublin.
- Mr. Maurice J. Glennon of Drumcondra, Dublin.
- Mr. Francis McBryen of Omagh.
- Mr. Timothy J. McCormack of Tipperary.
- Mr. Joseph A. McCullough of Newry.
- Mr. John McGuigan of Armagh.
- Mr. Bernard F. Shields of Dublin.

## SCHOLARSHIPS IN CROCHET WORK AND SPRIGGING.

Nineteen candidates competed for the three Scholarships offered for the purpose of training teachers of Crochet-work and Sprigging which were awarded to:—

*Scholarships in Crochet-work.*

- Miss Mary J. O'Brien of Bandon, Co. Cork.
- Miss Maggie Martin of Clonsa.

*Scholarship in Sprigging.*

- Miss Bridget McMenamin of Ballybofey, Co. Donegal.



TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &amp;c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>MUNSTER.</b>				
COUNTY CORK:				
Barra Urban District, . . . . .	349 2 10	500 0 0	—	228 2 10
Kilrush, " . . . . .				
COUNTY CORK:				
Clophilly Urban District	4,488 14 10	5,125 0 0	—	3,808 14 10
Ferns, " . . . . .				
Kinsale, " . . . . .				
Maroon, " . . . . .				
Malton, " . . . . .				
Midleton, " . . . . .				
Skibbereen, " . . . . .	467 0 0	375 0 0	—	92 0 0
Youghal, " . . . . .				
Queenstown, " . . . . .				
CORK COUNTY BOROUGH . . . . .	3,128 18 0	*3,411 8 3	—	*717 9 0
COUNTY KERRY:				
Kilgarney Urban District, . . . . .	1,346 18 9	790 0 0	—	462 18 9
Lisdoon, " . . . . .				
Trillick, " . . . . .				
COUNTY LIMERICK . . . . .	645 0 0	430 0 0	—	215 0 0
LIMERICK COUNTY BOROUGH . . . . .	1,629 10 3	*1,808 11 2	—	240 10 1
COUNTY TIPPERRARY (NORTH RINDING):				
Neagh Urban District, . . . . .	1,057 1 9	660 0 0	—	397 1 0
Templemore, " . . . . .				
Thurles, " . . . . .				
COUNTY TIPPERRARY (SOUTH RINDING):				
Carrick-on-Suir Urban District, . . . . .	601 3 2	430 0 0	—	441 3 2
Cashel, " . . . . .				
Clonmel, " . . . . .				
Tipperrary Joint Urban and Rural Districts, . . . . .	719 8 0	450 0 0	—	269 8 0
COUNTY WATERFORD:				
Dungarvan Urban District, . . . . .	1,071 1 0	500 0 0	—	574 1 0
Waterford County Borough:				
Waterford County Borough:	1,822 1 7	*2,047 10 11	—	*274 1 8
Totals for Munster, . . . . .	18,243 16 8	11,797 19 4	30 0 0	6,825 17 6

\* Contributions for the financial year ended 31st March, 1910.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &amp;c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<b>ULSTER.</b>				
<b>COUNTY ANTRIM:</b>				
Ballymena Urban District,	328 0 0	300 0 0	—	280 0 0
Ballyvaughan Urban District,	645 0 0	320 0 0	—	325 0 0
Ballyvaughan Joint Urban and Rural Districts,	324 6 4	210 0 0	—	114 6 4
Capekerry Urban District,	285 1 4	215 0 0	—	70 1 4
Larne, „	455 12 3	300 0 0	—	155 12 3
<b>DUMFRIES COUNTY BOROUGH:</b>	17,668 4 7	*11,081 8 4	—	*6,586 16 3
<b>COUNTY ARMAGH:</b>				
Armagh Urban District,	520 0 0	220 0 0	—	300 0 0
Lurgan „	437 5 4	350 0 0	—	87 5 4
Lurgan „	707 1 5	1500 0 0	—	1192 1 5
Portadown, „	610 0 0	500 0 0	—	110 0 0
<b>COUNTY CAVAN:</b>				
Belmont Urban District,	787 0 1	480 0 0	—	307 0 1
Corkill, „				
<b>COUNTY DUNDALK:</b>				
Dundalk Urban District,	732 14 0	424 0 0	—	308 14 0
<b>COUNTY DOWN:</b>				
Barclay Urban District,	570 0 0	550 0 0	—	20 0 0
Down „	600 0 0	550 0 0	500 0 0	50 0 0
Down „	387 12 2	550 0 0	—	137 12 2
Holywood „	250 10 10	500 0 0	—	250 10 10
Newry „	725 0 0	600 0 0	—	125 0 0
Newry „	505 8 3	450 0 0	—	55 8 3
Whitehead, „	102 1 10	70 0 0	—	32 1 10
<b>COUNTY FERMANAGH:</b>				
Enniskillen Urban District,	400 0 0	400 0 0	—	—
<b>COUNTY LONDONDERRY:</b>				
Londonderry Urban District,	1,007 12 0	514 0 0	124 0 0	369 12 0
Coleraine „	504 0 0	400 0 0	—	104 0 0
<b>LONDONDERRY COUNTY BOROUGH:</b>	1,685 14 2	1,268 1 4	—	*417 0 0
<b>COUNTY MONAGHAN:</b>				
Monaghan Urban District,	756 2 1	625 0 0	—	131 2 1
Castledown „				
Crumlin „				
<b>COUNTY TYRONE:</b>				
Cookstown Urban District,	1,423 7 0	850 0 0	—	573 7 0
Donagh „				
Donagh „				
<b>TOTALS:</b>	21,826 1 9	21,045 2 6	204 0 0	10,436 29 3

\* Contributions for the financial year ended 31st March, 1910.

† Includes £100 contribution to separate scheme for girls.

TABLE showing by COUNTIES the AMOUNTS ALLOCATED, &amp;c.—continued.

Names of Counties, Urban Districts and County Boroughs.	Total Allocation.	Annual Contribution from Department's Endowment.	Special Grants from Department's Endowment.	Contribution from Local Rates.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
CONNAUGHT.				
COUNTY GALWAY: . . . . .				
Ballinasloe Urban District, . . . . .	1,743 2 0	800 0 0	—	948 2 0
Galway, . . . . .	801 0 4	680 0 0	—	121 0 4
COUNTY LEMLEN: . . . . .	600 0 0	300 0 0	100 0 0	200 0 0
COUNTY MAYO: . . . . .				
Castlebar Urban District, . . . . .	778 18 7	380 0 0	—	398 18 7
Westport, . . . . .				
COUNTY ROSSKILLEN: . . . . .	700 0 0	420 0 0	—	300 0 0
COUNTY SLEIGH: . . . . .	470 0 0	250 0 0	—	220 0 0
New Urban District, . . . . .	640 0 0	320 0 0	—	90 0 0
Totals for Connaught, . . . . .	5,788 0 11	3,420 0 0	100 0 0	2,273 0 11
TOTALS FOR LEINSTER, . . . . .	22,548 4 0	21,804 18 2	352 18 4	10,388 10 3
TOTALS FOR MUNDRA, . . . . .	13,218 16 8	11,787 19 4	39 0 0	6,425 17 4
TOTALS FOR ULSTER, . . . . .	21,856 1 9	21,025 2 6	334 0 0	16,438 19 3
TOTALS FOR CONNAUGHT, . . . . .	5,788 0 11	3,420 0 0	100 0 0	2,273 0 11
TOTALS FOR IRELAND, . . . . .	58,411 4 1	58,309 0 0	816 16 4	29,514 5 6

TABLE

LIST OF TECHNICAL SCHOOLS AND SCIENCE AND ART  
Department during the Financial Year, 1st April, 1909  
Academic Year, 1st August, 1908—31st July, 1909.

School No.	Name of School.	Preparatory Course.		Specialised Courses.	
		No. of students in range of whom grants were paid.	Amount of Grant.	No. of students in range of whom grants were paid.	Amount of Grant.
			£ s. d.		£ s. d.
	<b>LEINSTER.</b>				
	<b>CO. DUBLIN.</b>				
6611	Bellebridge : Technical School, . . . .	4	2 7 3	37	90 17 7
6648	Blackrock : Technical School, . . . .	15	58 8 9	37	145 10 9
6160	Blacktown : Municipal Technical School, . . . .	32	22 12 3	182	344 13 6
6666	Blackstone : School of Commerce, . . . .	—	—	100	191 4 7
6643	Bungard : Technical School, . . . .	14	21 1 2	98	217 4 9
	<b>CO. DUBLIN (continued).</b>				
6343	*Christian Brothers' Novels, Memo, . . . .	—	—	*102	58 15 7
6010	City of Dublin Technical Schools, . . . .	58	57 10 2	546	1,489 9 8
	<b>CO. KILDARE.</b>				
4706	Abby : Technical School, . . . .	2	1 1 10	5	5 16 8
4448	Naas : Technical School, . . . .	2	2 4 4	5	4 19 7
	<b>CO. KILKENNY.</b>				
6627	Kilkenny : City Technical School, . . . .	2	3 15 4	27	40 18 5
	<b>KING'S COUNTY.</b>				
4689	Ber : Technical School, . . . .	8	1 18 7	28	16 2 3
4688	Fullamere : Technical School, . . . .	6	2 5 4	25	31 19 7
	<b>CO. LOUTH.</b>				
4416	Drogheda : Municipal Technical School, . . . .	13	26 0 0	76	131 0 4
4415	Dundalk : Municipal Technical School, . . . .	10	14 11 1	58	75 1 4
	<b>CO. MEATH.</b>				
6924	Nasco : Technical School, . . . .	10	5 13 3	32	34 5 0
	<b>QUEEN'S COUNTY.</b>				
6617	Mayborough : Technical School, . . . .	22	6 2 10	30	23 10 6
	<b>CO. WESTMEATH.</b>				
6327	Athlone : Technical School, . . . .	4	3 5 0	6	3 0 7
6886	Mullingar : Technical School, . . . .	7	5 5 7	8	9 7 2
	<b>CO. WEXFORD.</b>				
4430	Enniscorthy : Technical School, . . . .	4	5 10 5	5	8 17 10
4793	New Ross : Technical School, . . . .	12	11 6 3	9	4 19 6
4347	Wexford : Municipal Technical School, . . . .	3	3 29 0	34	69 15 4
	<b>CO. WICKLOW.</b>				
6697	Arklow : Technical School, . . . .	11	15 12 0	14	25 3 2
6457	Bray : Technical School, . . . .	37	54 12 3	19	22 3 1
6702	Wicklow : Technical School, . . . .	3	14 11 1	17	29 19 7
	<b>TOTALS FOR LEINSTER. . . .</b>	<b>273</b>	<b>305 12 1</b>	<b>1,564</b>	<b>5,036 15 0</b>
	<b>MUNSTER.</b>				
	<b>CO. CORK.</b>				
6761	Ballyvane : Technical School, . . . .	—	—	9	18 4 4
6603	Bandon : Technical School, . . . .	1	0 7 4	7	17 5 4
6706	Bantry : Technical School, . . . .	—	—	5	1 18 9
6709	Charleville : Technical School, . . . .	—	—	8	8 8 2
6667	Clooskey : Technical School, . . . .	6	5 2 10	14	13 13 3

\* Training College Classes under Section VI.



## II.

SCHOOLS AND CLASSES showing the Grants made by the  
—31st March, 1910, in respect of Instruction given during the

School of Art.		Teachers' Classes.		Apprentices' Classes.		Total.		School No.
No. of Students	Amount of Grant.	No. of Students	Amount of Grant.	No. of Students	Amount of Grant.	Total No. of Students in respect of which grants were paid.	Total Grant.	
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	—	—	—	—	61	52 4 39	6611
—	—	—	—	—	—	85	174 19 6	6628
—	—	13	60 18 0	—	—	227	429 4 11	6163
—	—	—	—	—	—	126	191 6 7	6408
—	—	—	—	—	—	115	238 5 11	6961
—	—	—	—	—	—	102	58 15 7	6143
—	—	17	35 15 0	—	—	623	1,935 14 10	6010
—	—	—	—	—	—	7	6 18 6	6795
—	—	—	—	—	—	8	7 4 0	6442
—	—	—	—	—	—	25	44 13 2	6907
—	—	—	—	—	—	36	15 5 10	6509
—	—	—	—	7	13 4 6	51	47 10 2	6906
—	—	—	—	—	—	26	155 10 1	6415
—	—	—	—	—	—	68	89 12 5	6415
—	—	—	—	—	—	42	36 18 2	6924
—	—	—	—	—	—	42	39 13 2	6917
—	—	—	—	—	—	10	6 5 7	6507
—	—	—	—	—	—	15	14 18 9	6906
—	—	—	—	—	—	6	12 8 3	6620
—	—	—	—	—	—	21	16 5 9	6790
—	—	—	—	—	—	29	42 14 4	6947
—	—	—	—	—	—	25	43 14 2	6602
—	—	—	—	—	—	55	77 2 3	6437
—	—	—	—	—	—	25	38 10 4	6792
—	—	20	67 13 9	7	13 5 6	1,993	3,461 9 4	
—	—	—	—	—	—	9	18 4 4	6761
—	—	—	—	—	—	8	17 12 8	6906
—	—	—	—	—	—	5	1 18 9	6766
—	—	—	—	—	—	8	2 8 2	6700
—	—	—	—	—	—	20	18 16 1	6667

of the Regulations for Technical Schools, &c.

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

School No.	Name of School.	Preparatory Course		Specialised Courses	
		No. of Pupils in respect of whom fees were paid	Amount of Grant	No. of Pupils in respect of whom fees were paid	Amount of Grant
			£ s. d.		£ s. d.
CO. CORK—continued.					
6071	Doneraile Technical School, . . . .	—	—	7	14 8 10
6064	Doneraile: Convent of Christy, St. Mary's	—	—	18	34 7 11
6050	Formoy Technical School, . . . .	—	—	28	55 5 0
6015	Kinsale Technical School, . . . .	2	1 15 5	4	4 12 10
6029	Harroon Technical School, . . . .	—	—	24	32 4 10
6066	Millicott Technical School, . . . .	—	—	15	22 0 0
6068	Millicottstown Technical School, . . . .	—	—	1	0 7 1
6019	Passage West Technical School, . . . .	—	—	4	11 10 4
6004	Queenstown Technical School, . . . .	—	—	73	200 3 6
6259	Rangskiddy Technical School, . . . .	—	—	5	12 14 10
6002	Shibbena Technical School, . . . .	—	—	22	15 3 10
6436	Youghal Presentation Convent, . . . .	—	—	20	0 11 8
6010	Youghal Technical School, . . . .	—	—	15	41 3 8
CO. DUBLIN OF CORK					
6060	Crawford Municipal Technical Institute, .	—	—	197	587 5 8
6068	Presbyterian Brothers' Training College, .	—	—	75	31 2 4
6068	School of Commerce, . . . .	34	37 17 0	174	172 34 11
6064	St. Vincent's Convent, Kilkenny School, .	—	—	35	37 0 8
CO. KERRY					
6714	Beagle Technical School, . . . .	—	—	4	2 0 10
6080	Killarney Technical School, . . . .	—	—	3	9 10 10
6371	Tralee Central Technical School, . . . .	16	22 15 3	41	83 13 7
CO. DUBLIN OF LINCOLN					
6030	Municipal Science, Art and Technical School,	42	55 0 2	308	404 0 7
CO. TIPPERARY					
6052	Carrigrohane Technical School, . . . .	—	—	7	17 10 4
6256	Glencol Technical School, . . . .	3	3 6 9	79	150 9 4
6206	Roosna Technical School, . . . .	18	34 15 11	24	120 19 4
6145	Thurles Presentation Convent, . . . .	—	—	27	47 1 4
6005	Tipperary Technical School, . . . .	6	10 7 9	24	32 14 8
CO. WATERFORD					
6049	Deansgrange Technical School, . . . .	—	—	15	20 2 0
6048	Lisnare Technical School, . . . .	—	—	1	0 16 8
6010	Tramore Technical School, . . . .	—	—	4	4 3 2
CO. DUBLIN OF WATERFORD					
6477	Central Technical Institute, . . . .	5	3 1 3	73	144 16 1
6018	De La Salle Training College, . . . .	—	—	700	355 17 5
TOTALS FOR MUNICH, . . . .		124	169 15 8	1,581	3,389 3 0
ULSTER.					
CO. ANTRIM					
6338	Ballymena Municipal Technical School, .	26	49 15 11	371	487 15 4
6860	Ballymoney Technical School, . . . .	27	56 3 4	335	305 11 4
6345	Carrickfergus Technical School, . . . .	27	25 20 10	46	111 8 7
6232	Larne Technical School, . . . .	12	20 17 11	114	339 3 2
CO. DUBLIN OF BELFAST					
6227	Municipal Technical Institute, . . . .	443	696 7 10	1,150	2,646 19 0

\* Training College Classes under Section VI.

## AND ART SCHOOLS AND CLASSES—continued.

School of Art.		Teachers' Classes.		Apprentice' Classes.		Total.		School No.
No. of Students	Amount of Grant	No. of Students	Amount of Grant	No. of Students	Amount of Grant	No. of Students in receipt of who no grants were paid.	Total Grant.	
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	—	—	—	—	7	14 8 10	6671
—	—	—	—	—	—	19	34 7 11	6684
—	—	—	—	18	25 94 1	49	77 1 1	6731
—	—	—	—	—	—	8	6 8 3	6615
—	—	—	—	—	—	24	32 4 10	6668
—	—	—	—	—	—	15	22 9 6	6766
—	—	—	—	—	—	1	0 7 1	6768
—	—	—	—	—	—	4	11 19 4	6689
—	—	—	—	—	—	73	208 3 4	6664
—	—	—	—	—	—	6	13 14 19	6726
—	—	—	—	—	—	22	16 3 10	6662
—	—	—	—	—	—	29	6 11 8	6404
—	—	—	—	—	—	15	41 2 8	6630
186	1,261 17 3	—	—	—	—	209	1,649 2 11	6696
—	—	—	—	—	—	55	31 2 4	6688
—	—	—	—	—	—	138	236 11 11	6688
—	—	—	—	—	—	35	57 9 8	6694
—	—	—	—	—	—	4	2 9 10	6714
—	—	—	—	—	—	3	8 19 19	6680
—	—	—	—	—	—	55	66 8 13	6571
88	335 19 6	57	79 18 7	38	79 4 9	428	1,814 15 7	6639
—	—	—	—	—	—	7	17 19 4	6686
—	—	—	—	19	49 15 0	94	297 10 9	6696
—	—	—	—	—	—	42	155 15 3	6396
—	—	—	—	—	—	27	47 1 6	6148
—	—	—	—	—	—	30	62 2 8	6686
—	—	—	—	—	—	15	20 2 0	6499
—	—	—	—	—	—	1	9 15 6	6306
—	—	—	—	—	—	4	4 2 2	6310
41	199 3 1	16	35 7 11	—	—	139	338 8 4	6477
—	—	—	—	—	—	200	395 17 3	6016
315	1,797 19 10	71	115 6 6	65	164 15 10	1,856	5,084 1 7	
—	—	19	35 8 6	6	5 0 0	222	544 19 9	6388
—	—	11	25 12 7	—	—	173	388 7 5	6853
—	—	—	—	—	—	93	137 14 5	6465
—	—	25	25 13 4	—	—	151	285 18 5	6232
569	2,109 2 10	41	91 8 0	11	58 7 13	2,160	5,103 4 2	6227

of the Regulations for Technical Schools, &amp;c.

TABLE II.—LIST OF TECHNICAL SCHOOLS AND SCIENCE

School No.	Name of School.	Preparatory Course.		Specialised Courses.	
		No. of pupils in the part of school course given here paid.	Amount of Grant.	No. of pupils in special courses given here paid.	Amount of Grant.
			£ s. d.		£ s. d.
CO. ARMAH.					
6397	Armagh : Municipal Technical School, . . . .	22	35 9 4	68	100 9 1
6338	Armagh : Natural History and Philosophical Society's Art Class.	—	—	8	8 17 5
6423	Lurgan : Convent of Our Lady of Mercy, . .	18	30 12 1	23	79 19 8
6397	Lurgan : Municipal Technical School, . . .	28	95 19 6	47	75 12 2
6574	Portadown : Municipal Technical School, . .	8	11 6 4	46	104 10 2
CO. DOWS.					
6582	Banbridge : Technical School, . . . .	40	47 17 1	28	42 3 11
6487	Belfast : Technical School, . . . .	18	19 12 3	41	38 14 9
6572	Belfast : Technical School, . . . .	6	10 2 9	34	86 13 2
6544	Newry : Municipal Technical School, . . .	39	46 4 10	86	183 15 11
6645	Newtownards : Municipal Technical School, .	22	31 16 1	25	30 6 5
6746	Waterfoot : Municipal Technical School, . .	9	8 10 11	39	11 2 10
CO. FERMANAGH.					
6672	Kesh : Technical School, . . . .	—	—	14	9 12 2
CO. LONDONDERRY.					
6534	Coleraine : Technical School, . . . .	14	26 7 4	75	168 3 10
6663	Magherafelt : Technical School, . . . .	34	49 17 10	33	36 15 7
CO. DORSET OF LONDONDERRY.					
6697	Municipal Technical School, . . . .	42	49 18 0	197	294 18 4
CO. TYRONE.					
6591	Cookstown : Technical School, . . . .	21	35 6 5	36	17 13 6
6551	Dungannon : Technical School, . . . .	17	18 12 4	32	88 10 4
6707	Omagh : Technical School, . . . .	19	30 10 7	30	43 0 10
6708	Stirlings : Technical School, . . . .	29	45 7 2	36	53 11 10
TOTALS FOR ULSTER, . . . .		946	1,361 2 20	2,447	5,281 19 0
CONNAUGHT.					
CO. GALWAY.					
6586	Belfast : Technical School, . . . .	4	4 13 9	2	3 1 10
6606	City of Galway Technical Institute, . . .	7	4 6 7	12	5 5 3
CO. SLIGO.					
6752	Sligo : Municipal Technical School, . . .	4	4 5 2	26	31 1 11
TOTALS FOR CONNAUGHT, . . . .		15	13 5 6	72	100 9 0
TOTALS FOR LEINSTER (24 Schools), . . .		275	345 12 1	1,581	3,084 18 0
TOTALS FOR MUNSTER (26 Schools), . . .		334	109 15 8	1,384	2,869 3 6
TOTALS FOR ULSTER (24 Schools), . . .		946	1,361 2 10	2,447	5,281 19 0
TOTALS FOR CONNAUGHT (3 Schools), . . .		15	13 5 6	72	100 9 0
TOTALS FOR IRELAND (57 Schools), . . .		1,360	1,829 17 1	5,281	11,256 0 9

## AND ART SCHOOLS AND CLASSES—continued.

School of Art.		Teachers' Classes.		Apprentices' Classes.		Total.		School No.
No. of Students	Amount of Grant.	No. of Students	Amount of Grant.	No. of Students	Amount of Grant.	Total of students in payment of fee in Grants since 1901	Total Orlam.	
	£ s. d.		£ s. d.		£ s. d.		£ s. d.	
—	—	—	—	—	—	50	135 18 5	3397
—	—	—	—	—	—	8	8 17 5	3038
—	—	—	—	—	—	46	110 14 9	3433
—	—	—	—	—	—	105	167 12 2	3367
—	—	27	38 11 10	—	—	81	150 7 4	3374
—	—	—	—	—	—	65	90 1 0	3363
—	—	7	16 17 4	—	—	61	115 8 4	3367
—	—	—	—	—	—	40	66 18 0	3372
—	—	—	—	—	—	122	220 0 9	3544
—	—	—	—	—	—	47	58 2 6	3545
—	—	—	—	—	—	19	19 13 9	3748
—	—	—	—	24	98 10 1	38	108 2 3	3672
—	—	25	34 0 2	—	—	112	223 17 4	3535
—	—	—	—	—	—	47	86 14 5	3563
146	379 9 10	24	90 6 9	—	—	219	757 8 1	3637
—	—	—	—	—	—	60	92 19 11	3700
—	—	—	—	—	—	69	107 2 10	3881
—	—	—	—	—	—	49	78 17 2	3707
—	—	—	—	—	—	65	90 19 0	3708
655	2,479 12 8	179	212 9 4	41	194 17 11	4,368	8,624 12 11	
—	—	—	—	—	—	6	7 15 7	3593
—	—	—	—	—	—	19	9 11 10	3606
—	—	—	—	—	—	42	96 7 1	3705
—	—	—	—	—	—	87	113 14 6	
—	—	39	97 13 9	7	15 5 6	1,893	3,401 9 4	
325	1,747 19 10	71	116 8 6	63	161 15 10	1,854	5,084 1 7	
656	2,479 12 8	179	212 9 4	41	194 17 11	4,268	9,824 13 11	
—	—	—	—	—	—	87	113 14 6	
970	4,327 12 6	280	228 9 9	111	351 19 2	5,102	10,335 19 4	

LIST OF DAY SECONDARY SCHOOLS, showing the GRANTS paid by the Department  
Instruction in the Subjects of the Department's Programme given

No. of School	Name of School.	EXPERIMENTAL SCIENCE.				Amount of Grant.	DRAWING.				Amount of Grant.
		No. of Students recognised for Grant.					No. of Students recognised for Grant.				
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
LEINSTER.											
	Co. CARLOW.					£ s. d.					£ s. d.
6047	Boys' School - Presentation Convent	12	6	7	-	48 11 9	12	5	7	-	17 3 5
6188	Boys' School - St. Joseph's School	12	8	4	-	48 17 6	15	8	-	-	7 7 7
6230	Carlow - Christian Brothers' School.	10	11	4	-	36 9 10	10	11	-	-	7 0 1
6260	Carlow - Convent of Mercy	9	8	5	5	56 35 9	9	8	5	5	18 0 7
6182	Knockbeg - St. Mary's College.	20	20	5	-	60 8 1	20	20	-	-	18 13 11
6084	Rathfrilly - D'Arcy's School.	6	-	-	-	7 14 0	6	-	-	-	1 15 6
6256	Tallow - Brigidine Convent	21	12	6	-	63 4 3	21	12	-	-	12 0 6
6197	Tallow - St. Patrick's Seminary.	13	11	-	-	32 10 4	13	11	-	-	10 17 10
Co. DUBLIN.											
6024	Ballinacorney - Loreto Convent	37	18	3	3	103 11 11	37	18	-	-	53 11 1
6174	Ballinacorney - Marist Girls' School	12	12	5	-	48 14 8	12	12	-	-	5 12 6
6093	Blackrock College, . . .	68	74	30	13	262 3 10	68	74	-	-	44 14 10
6269	Blackrock-Dominican Convent, Bon Hill	24	27	-	-	46 5 9	24	17	9	-	15 5 0
6085	Blackrock - Irish Pre- paratory School	20	5	6	-	71 14 10	20	5	6	-	24 12 6
6187	Castleknock - Marist's School	9	7	-	-	30 1 9	9	7	3	-	6 6 3
6257	Castleknock - Marist's School	10	8	6	-	45 3 4	10	8	3	1	14 15 6
6201	Castleknock - St. Vincent's College	60	54	19	1	221 7 10	60	54	-	-	31 12 8
6202	Clonsilla - Mount Sackville Convent.	12	8	3	2	46 19 3	12	8	-	-	6 17 0
6128	Clonsilla - St. Joseph's Seminary.	15	5	1	-	26 3 11	15	5	-	-	12 16 11
6251	Clonsilla - Marist Boys' School.	13	17	15	-	103 13 2	13	17	-	-	7 0 8
6028	Dalkey - Loreto Abbey, .	24	13	1	-	41 8 8	24	13	-	-	12 8 7
6003	Donnybrook - St. Mary's University College	7	3	2	-	14 12 9	7	3	-	-	5 8 8
6150	Knightsbridge - Christian Brothers' School.	17	15	6	-	68 4 3	17	15	-	-	8 14 7
6050	Knightsbridge - Crockett's School	4	-	-	-	3 16 10	4	-	-	-	0 13 3
6026	Knightsbridge - Presentation Brothers' College	7	7	2	-	25 17 11	7	7	-	-	3 13 4
6045	Knightsbridge - Victoria School	5	2	-	-	8 28 5	5	2	-	-	2 6 10
6098	Rathfriland - Loreto Abbey.	20	20	9	-	74 1 8	20	20	3	1	27 6 2
6791	Rathfriland - St. Columba's College.	8	5	1	2	22 14 5	8	5	-	-	2 18 1
6201	Rathfriland - Norfolk College.	6	3	-	2	17 0 8	6	3	-	2	5 6 8
6065	Rathfriland College, . .	13	12	-	-	43 16 6	13	12	-	-	9 9 0

## III.

during the Financial Year, 1st April, 1908—31st March, 1910, in respect of  
during the Academic Year, 1st August, 1908—31st July, 1909.

MANUAL INSTRUCTION.					DOMESTIC ECONOMY.					Total Amount of Grants.	No. of School
No. of Students recommended for Grant.				Amount of Grant	No. of Students recommended for Grant.				Amount of Grant		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	8	7	7	—	19 11 10	85 6 3	4247
15	5	—	—	7 1 4	—	—	—	—	—	64 6 5	6188
12	—	—	—	3 7 2	—	—	—	—	—	45 17 8	6170
—	—	—	—	—	9	—	5	5	15 3 4	92 6 8	6269
11	—	1	—	4 12 2	—	—	—	—	—	56 14 2	6382
—	—	—	—	—	—	—	—	—	—	8 9 4	6554
—	—	—	—	—	30	—	7	—	17 17 1	93 1 10	6356
12	11	—	—	11 11 8	—	—	—	—	—	53 19 16	6107
—	—	—	—	—	—	—	9	10	21 16 7	146 19 7	9224
—	—	—	—	—	—	—	—	—	—	54 7 2	6174
—	—	—	—	—	—	—	—	—	—	426 18 8	6660
—	—	—	—	—	—	—	13	—	11 15 1	77 5 10	6228
29	5	6	—	41 10 4	—	—	—	—	—	158 6 8	6865
—	—	—	—	—	—	—	—	—	—	26 8 9	6387
—	—	—	—	—	—	—	—	—	—	60 6 16	6357
—	—	—	—	—	—	—	—	—	—	253 9 6	6299
—	—	—	—	—	—	—	—	—	—	56 10 2	6262
—	—	—	—	—	—	—	—	—	—	40 18 10	6122
—	—	—	—	—	—	—	—	—	—	109 13 10	6291
—	—	—	—	—	4	—	6	—	7 17 8	61 14 11	6106
—	—	—	—	—	—	—	—	—	—	17 2 5	6066
—	—	—	—	—	—	—	—	—	—	56 18 39	6110
—	—	—	—	—	4	—	—	—	1 18 4	6 12 7	6050
—	—	—	—	—	—	—	—	—	—	24 11 3	6038
—	—	—	—	—	5	4	—	—	3 4 6	12 9 8	6546
—	—	—	—	—	—	—	6	—	8 0 7	199 8 5	6096
—	—	—	—	—	—	—	—	—	—	25 15 6	6791
—	—	—	—	—	—	—	—	—	—	22 15 4	6264
—	—	—	—	—	—	—	—	—	—	20 5 0	6095

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCHOOL.				Amount of Grant.	DRAWING				Amount of Grant.
		No. of Students reopened for Grant.					No. of Students reopened for Grant.				
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
6020	CO. DUBLIN—(continued.) Railwaymen: Lenoir Con- vent.	33	32	—	—	8 s. d. 24 9 5	11	12	4	4	8 s. d. 18 18 3
6021	Railwaymen: St. Mary's College.	25	11	8	2	96 9 11	25	11	—	—	7 16 3
6022	Railwaymen: Farnham Trinity Preparatory School	26	16	6	—	102 17 7	26	16	6	—	43 1 2
6045	Trinity: Carmelite College.	19	6	14	—	64 8 7	19	6	—	—	5 2 1
6156	CO. ROSKILL OF DUBLIN. Alexandria College.	—	3	12	6	44 13 1	2	3	3	—	2 2 0
6284	Alexandria School.	33	33	—	—	87 5 7	31	15	—	—	26 19 8
6342	Belvedere College.	19	30	2	—	59 16 5	19	30	—	—	9 1 1
6006	Bertrand Intermediate School for Girls	18	5	—	—	21 6 2	13	5	—	—	4 11 0
6271	Catholic University School.	12	8	—	—	23 11 0	12	8	—	—	4 4 2
6162	Christian Brothers' School, James's Street.	65	39	12	—	146 3 6	65	39	11	—	44 2 4
6219	Christian Brothers' School, Munster.	27	20	—	—	55 4 11	27	20	—	—	13 14 2
6130	Christian Brothers' School, North Brunswick Street.	32	14	—	—	51 16 0	32	14	—	—	11 11 10
6150	Christian Brothers' School, North Richmond Street.	154	125	84	—	112 16 7	154	125	—	—	74 2 4
6117	Christian Brothers' School, Sydney Street.	74	50	30	10	240 1 8	71	50	—	—	40 2 0
6344	Christian Brothers' School, Westland Row.	39	22	22	—	112 12 0	36	22	—	—	16 2 10
6647	Church Home School, Clyde Road.	6	4	0	6	79 18 6	6	4	—	—	3 19 6
6091	Dominican Intermediate and Commercial School for Girls	38	18	—	—	64 9 6	38	18	—	—	10 0 8
6182	Dominican School for Boys.	58	18	6	—	88 17 11	55	18	—	—	11 11 2
6082	Dominican College, Beales Street.	70	62	34	13	312 7 7	70	62	—	—	37 12 11
6463	Harrington College.	4	3	—	—	7 6 4	4	3	2	—	4 3 2
6004	King's Hospital.	32	27	20	3	152 6 6	32	27	—	—	15 6 10
6065	Lennox College, St. Stephen's Green.	30	28	6	—	66 4 8	30	28	—	—	24 6 9
6023	Lennox Convent, North Great George's Street.	15	9	5	—	48 7 0	15	9	—	—	6 9 11
6168	Mountjoy School.	37	40	30	17	244 6 3	37	40	—	—	24 7 1
6054	Rolland High School.	10	11	—	—	36 11 7	10	11	1	—	12 10 7
6245	St. Andrew's College.	56	50	18	10	240 19 6	56	50	—	—	39 6 9
6132	St. Margaret's Hall, Moyle Road.	4	10	4	1	28 17 3	4	10	—	—	3 7 10
6115	St. Vincent's Orphanage.	32	26	—	—	108 6 4	32	26	6	—	50 8 2
6127	The High School.	19	28	9	4	101 8 6	19	25	3	—	26 11 4
6146	Wesley College.	21	20	13	—	72 12 8	21	20	3	—	18 12 2



## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.					DOMESTIC ECONOMY.					Total Amount of Grants.	No. of School.
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
—	—	—	—	£ s. d.	—	—	—	—	—	£ s. d.	£ s. d.
—	—	—	—	—	—	—	—	—	—	—	6020
—	—	—	—	—	—	—	—	—	—	—	6251
26	10	5	—	47 16 2	—	—	—	—	—	—	6302
—	—	—	—	—	—	—	—	—	—	—	6343
—	—	—	—	—	—	—	—	—	—	—	6399
—	—	—	—	—	—	—	—	—	—	—	6394
—	—	—	—	—	—	—	—	—	—	—	6162
—	—	—	—	—	12	4	7	—	20 19 8	—	6304
—	—	—	—	—	—	—	—	—	—	—	6271
—	—	—	—	—	—	—	—	—	—	—	6102
27	20	—	—	37 13 8	—	—	—	—	—	—	6319
32	14	—	—	15 11 11	—	—	—	—	—	—	6120
141	—	—	—	54 12 9	—	—	—	—	—	—	6166
43	—	—	—	15 13 7	—	—	—	—	—	—	6117
—	—	—	—	—	—	—	—	—	—	—	6344
—	—	—	—	—	—	—	—	—	—	—	6347
—	—	—	—	—	—	—	4	4	9 6 7	—	6351
—	—	—	—	—	—	—	—	—	—	—	6192
—	—	—	—	—	—	—	27	10	35 5 1	—	6380
—	—	—	—	—	—	—	—	—	—	—	6163
—	—	—	—	—	—	—	—	—	—	—	6364
—	—	—	—	—	—	—	16	—	24 12 0	—	6345
—	—	—	—	—	—	—	5	3	10 32 3	—	6321
—	—	—	—	—	—	—	—	—	—	—	6168
—	—	—	—	—	—	—	—	—	—	—	6254
—	—	—	—	—	—	—	—	—	—	—	6243
—	—	—	—	—	—	—	—	—	—	—	6232
20	30	10	—	27 14 8	—	—	—	—	—	—	6115
—	—	—	—	—	—	—	—	—	—	—	6327
—	2	—	1	1 5 8	—	—	—	—	—	—	6146

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCIENCE.					DRAWING.				
		No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
	CO. KILDARE :					£ s. d.					£ s. d.
6817	Abby : Christian Brothers' Schools.	22	9	4	—	46 2 8	52	9	—	—	5 4 10
6886	Ceintrigo Girls' School.	35	10	—	—	54 7 8	35	10	12	—	24 18 6
6925	Monasteran : Christian Brothers' Schools.	9	12	—	—	21 5 10	9	12	—	—	5 17 10
6923	Nass : Christian Brothers' Schools.	15	11	—	—	30 15 6	15	11	—	—	6 18 8
6484	Newbridge : Dominican College.	3	5	4	—	14 19 8	5	5	—	—	2 3 8
6139	Salina : Clongowood Wood College.	40	54	37	18	240 15 10	49	56	9	—	40 9 11
	CO. KILKESBY :										
6804	Colton : Christian Brothers' Schools.	17	11	—	—	38 0 5	17	11	—	—	9 2 0
6433	Gorebridge : Brigids Convent.	7	5	1	2	25 17 6	7	5	—	—	5 0 7
6939	Kilkeny : Christian Brothers' Schools.	39	19	4	—	68 0 9	39	19	—	—	20 2 8
6487	Kilkeny College.	15	17	9	—	76 19 2	33	17	9	—	18 1 8
6268	Kilkeny : Loreto Convent.	14	11	—	—	38 18 8	14	11	4	—	15 3 11
6133	Kilkeny : St. Kieran's College.	17	28	15	7	111 4 8	17	28	—	—	19 3 2
6790	Kilkeny : Trades Preparatory School.	15	4	4	—	58 12 3	15	6	4	—	29 8 9
	KINC'S COTTAGE :										
6806	Bar : Presentation Brothers' Seminary.	12	12	12	—	79 3 8	12	12	8	—	10 12 4
6362	Portlough : Christian Brothers' Schools.	12	5	8	—	48 4 11	12	5	—	—	6 7 2
6849	Roscrea : Mount St. Joseph's Abbey.	51	28	21	—	172 0 11	51	28	—	—	18 0 5
	CO. LONGFORD :										
6228	Longford : St. Mel's College.	20	17	14	7	188 19 1	26	17	—	—	14 5 0
	CO. LOUTH :										
6993	Drogheda : Christian Brothers' Schools.	25	16	—	—	51 16 1	15	10	—	—	5 0 9
6998	Drogheda : Grammar School.	13	4	2	—	27 11 6	13	6	—	—	8 18 5
6173	Dundalk : Christian Brothers' Schools.	39	21	15	—	85 12 9	32	21	—	—	18 12 8
6330	Dundalk : Convent of Mercy.	14	11	—	—	39 6 1	14	11	—	—	7 16 8
6089	Dundalk : Educational Institution.	17	14	12	—	97 0 9	17	14	—	—	9 18 5
6454	Dundalk : Ladies' School.	6	2	5	—	20 17 11	6	2	—	—	2 8 7
6114	Dundalk : St. Mary's College.	21	19	14	9	106 11 6	22	19	—	—	12 17 10
	CO. MEATH :										
6308	Kells : Christian Brothers' Schools.	22	19	—	—	47 7 5	22	19	—	—	11 18 4
6588	Nevan : Loreto Abbey.	27	9	—	—	40 5 5	27	9	—	—	11 19 8

## SECONDARY SCHOOLS, &amp;c.—continued.

MANTAL INSTRUCTION.					DOMESTIC ECONOMY.					Total Amount of Grants.	No. of School.
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
16	—	—	—	4 13 10	—	—	—	—	—	56 0 11	6217
—	—	—	—	—	20	2	13	6	29 2 11	168 8 7	6255
9	12	—	—	7 9 6	—	—	—	—	—	34 13 2	6325
15	11	—	—	7 12 1	—	—	—	—	—	45 6 3	6321
—	—	—	—	—	—	—	—	—	—	17 8 4	6404
—	—	—	—	—	—	—	—	—	—	281 5 9	6139
28	—	—	—	9 18 3	—	—	—	—	—	57 0 3	6394
—	—	—	—	—	7	5	1	2	15 15 7	47 13 8	6458
—	—	—	—	—	—	—	—	—	—	88 3 2	6099
—	—	—	—	—	—	—	—	—	—	95 0 7	6487
—	—	—	—	—	19	6	5	4	21 8 0	73 4 7	6588
—	—	—	—	—	—	—	—	—	—	110 7 5	6115
15	6	4	—	44 2 7	—	—	—	—	—	123 3 7	6740
—	—	—	—	—	—	—	—	—	—	89 16 9	6305
13	5	—	—	5 19 8	—	—	—	—	—	56 11 1	6262
9	—	—	—	2 6 5	—	—	—	—	—	159 7 9	6849
6	5	—	—	4 0 3	—	—	—	—	—	152 4 4	6225
15	19	—	—	5 11 9	—	—	—	—	—	32 8 7	6191
—	—	—	—	—	—	—	—	—	—	30 10 3	6095
24	18	—	—	9 8 10	—	—	—	—	—	117 12 10	6172
—	—	—	—	—	8	—	7	—	14 6 10	52 1 7	6150
—	—	—	—	—	—	—	—	—	—	106 19 2	6359
—	—	—	—	—	—	—	—	—	—	32 6 6	6056
—	—	—	—	—	—	—	—	—	—	119 0 4	6116
25	19	—	—	29 15 4	—	—	—	—	—	99 18 1	6326
—	—	—	—	—	—	—	12	3	29 13 7	72 9 8	6368

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCIENCE.					Amount of Grant.	DRAWING.				Amount of Grant.
		No. of Students recognised for Grant.				No. of Students recognised for Grant.						
		1st Year.	2nd Year.	3rd Year.	4th Year.	1st Year.		2nd Year.	3rd Year.	4th Year.		
						£ s. d.					£ s. d.	
6310	QUEEN'S COUNTRY : Abbeyville: Reginald Con-	12	8	6	—	44 5 10	22	8	—	—	7 11 8	
6020	Abbeyville: Preston School.	6	2	7	—	20 8 1	4	2	—	—	3 6 1	
6008	Abbeyville Seminary,	4	4	—	—	10 2 10	4	4	—	—	3 8 1	
6756	Castle-town, De La Salle School.	27	17	8	—	110 12 0	27	17	—	—	22 10 8	
6176	Maryborough: Christian Brothers' Schools.	18	10	7	—	80 2 5	18	10	—	—	7 10 2	
6404	Mountmole: Monastery School.	16	12	—	—	49 12 9	16	12	—	—	11 5 4	
6329	Mountmole: St. Regid's Convent.	14	7	4	—	44 12 2	14	7	—	—	8 12 4	
6011	CO. WESTMIDLAND : Alders: Rosehigh School.	16	16	13	—	82 17 11	16	16	—	—	11 8 5	
6215	Alders: St. Mary's School	11	7	3	—	25 12 4	11	7	—	—	4 10 7	
6001	Midling: Christian Brothers' Schools.	28	11	12	—	54 8 10	28	11	—	—	12 7 7	
6436	Midling: Loreto Convent.	17	6	—	—	26 18 9	17	6	—	—	9 17 3	
6541	Midling: St. Finian's College.	41	17	16	—	90 0 4	41	17	—	—	13 9 5	
6124	CO. WEXFORD : Rannochilly: Christian Brothers' Schools.	28	18	4	1	72 10 0	28	18	—	—	11 7 8	
6249	Rannochilly: Loreto Con-	11	7	—	—	20 14 11	11	7	8	3	28 19 10	
6385	Corry: Loreto Abbey,	19	15	—	—	63 12 4	19	15	10	3	28 0 4	
6161	New Ross: Christian Brothers' Schools.	17	14	11	—	57 2 4	17	14	11	—	17 7 1	
6040	New Ross: Good Counsel College.	4	4	2	—	19 17 1	4	4	—	—	2 18 2	
6664	New Ross: John Ivory School.	4	3	2	—	11 1 1	4	3	—	—	2 0 11	
6733	Newtownbarry: St. Mary's Convent.	23	10	4	2	120 10 5	23	10	—	—	14 18 9	
6361	Wexford: Christian Brothers' Schools, Joseph Street.	26	20	14	—	52 14 2	26	20	—	—	10 9 5	
6005	Wexford: Ladies' School.	4	1	3	—	14 1 1	4	1	—	—	2 0 4	
6086	Wexford: Loreto Convent.	25	14	6	—	41 12 0	25	14	—	—	16 10 10	
6270	Wexford: St. Peter's College	12	10	18	—	44 14 7	12	10	—	—	8 12 6	
6230	Wexford: The Tab School.	5	6	3	2	31 2 10	5	6	—	—	4 4 0	
6663	CO. WICKLOW : Bessy: Loreto Convent	11	12	5	7	66 5 7	11	12	—	—	3 15 9	
TOTAL FOR LEINSTER.		2,408	1,764	796	158	8,125 9 8	2,408	1,764	102	19	1,322 2 2	

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.				DOMESTIC ECONOMY.					Total Amount of Grants.	No. of Schools.	
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.						Amount of Grant.
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
-	-	-	-	-	13	8	5	-	26 4 1	88 1 7	6610
-	-	-	-	-	-	-	-	-	-	22 14 2	8029
-	-	-	-	-	-	-	-	-	-	22 10 11	8038
-	-	-	-	-	-	-	-	-	-	134 2 8	8759
17	9	-	-	9 16 3	-	-	-	-	-	67 8 9	8476
13	9	4	-	13 6 3	-	-	-	-	-	74 4 4	8498
-	-	-	-	-	11	2	4	-	15 9 11	70 0 6	8559
14	16	18	-	15 15 3	-	-	-	-	-	110 1 7	9011
-	-	-	-	-	-	-	-	-	-	30 2 11	8215
-	-	-	-	-	-	-	-	-	-	89 14 5	8681
-	-	-	-	-	13	1	8	2	23 15 0	60 11 9	8536
-	-	-	-	-	-	-	-	-	-	123 9 9	8591
21	7	-	-	6 19 8	-	-	-	-	-	56 17 2	6194
-	-	-	-	-	-	-	8	1	15 6 5	62 1 2	8549
-	-	-	-	-	-	-	11	2	17 16 2	96 8 9	8685
-	-	-	-	-	-	-	-	-	-	74 16 5	4491
-	-	-	-	-	-	-	-	-	-	22 15 3	8940
-	-	-	-	-	-	-	-	-	-	25 2 0	8884
-	-	-	-	-	30	14	4	3	24 1 2	159 19 4	8733
16	18	12	-	17 15 7	-	-	-	-	-	119 19 2	8361
-	-	-	-	-	-	-	-	-	-	14 1 5	9005
-	-	-	-	-	-	-	7	-	8 3 2	86 6 0	8389
12	-	-	-	3 6 4	-	-	-	-	-	80 13 5	8670
-	-	-	-	-	-	-	-	-	-	35 8 10	8330
-	-	-	-	-	-	-	8	-	5 14 5	83 15 9	8022
628	269	64	1	438 0 7	127	31	202	57	451 9 11	10,548 2 4	

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCIENCE.				DRAWING.				
		No. of Students recognized for Grant.				No. of Students recognized for Grant.				Amount of Grant.
		1st Year.	2nd Year.	3rd Year.	4th Year.	1st Year.	2nd Year.	3rd Year.	4th Year.	
	MUNSTER.									£ s. d.
6137	CO. GRANT : Kearns : Christian Brothers' School.	55	19	14	—	107	9	6	—	19 2 10
6131	Kearns : St. Plannan's College.	20	19	16	—	82	8	8	—	14 2 9
6033	Kearns : St. Mary's School, Convent of Mercy.	14	9	—	—	28	11	9	—	15 10 6
6283	Kearns : Christian Brothers' School.	17	15	8	—	54	4	8	—	8 14 3
6296	Kearns : Christian Brothers' School.	22	11	10	—	60	3	11	—	7 18 8
	CO. CORK :									£ s. d.
6032	Blackrock : Ursuline Convent.	14	11	—	—	26	16	4	—	17 2 6
6075	Bahernant : St. Mary's Convent of Mercy.	8	7	5	2	44	15	11	—	11 4 6
6266	Chapelwell : Christian Brothers' School.	19	11	—	—	37	6	0	—	6 7 10
6145	Chapelwell : St. Joseph's Convent of Mercy.	12	12	18	—	99	4	8	—	30 6 7
6040	Douglasville : Christian Brothers' School.	5	4	4	—	16	13	8	—	3 4 10
6157	Fernaoy : Christian Brothers' School.	29	19	10	5	97	8	9	—	12 19 2
6306	Fernoy : Loreto Convent.	18	15	—	—	35	16	5	—	22 0 11
6191	Fernoy : St. Columba's College.	36	42	42	10	224	19	5	—	26 15 3
6369	Marazion : Convent of Mercy.	11	22	—	—	37	5	5	—	9 4 6
6546	Malton : Patricia Academy.	12	11	—	—	28	14	3	—	5 10 3
6131	Middleton : Christian Brothers' School.	20	19	15	—	88	6	9	—	12 13 1
6740	Middleton College, . . .	5	8	3	—	24	4	0	—	3 14 3
6110	Mullickstown : Christian Brothers' School.	24	2	14	—	57	19	8	—	21 17 3
6606	Quinnstown : Convent of Mercy.	15	—	—	—	25	18	1	—	6 19 6
6081	Quinnstown : Presentation Brothers' College.	11	8	4	—	42	9	4	—	7 6 0
6391	Quinnstown : Trades Preparatory School.	19	7	—	—	73	8	2	—	14 28 3
6111	Roskilly : Capuchin Franciscan College.	9	9	8	—	50	2	11	—	7 4 13
6742	Shannon : Intermediate and University School.	6	2	—	—	30	3	7	—	1 10 0
6028	Youghal : Christian Brothers' School.	15	14	15	—	82	10	7	—	8 2 3
	CO. DUBLIN OF CORK :									£ s. d.
6027	Christian Brothers' College.	28	45	22	—	149	3	6	—	18 19 9
6013	Christian Brothers' School, Our Lady's Mount.	110	60	42	20	419	12	4	—	41 15 11
6274	Christian Brothers' School, Sullivan's Quay.	28	28	—	—	67	17	5	—	15 9 1
6044	Grassmarket School, . . .	12	25	9	4	84	7	30	—	14 4 9

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTITUTIONS.					DOMESTIC ECONOMY.					Total Amount Grants.	No. of School.
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
					s. d.					s. d.	
18	—	—	—	4 15 11	—	—	—	—	—	131 8 3	6137
—	—	—	—	—	—	—	—	—	—	95 11 5	6231
—	—	—	—	—	—	—	—	—	—	44 11 5	6083
17	12	—	—	9 14 9	—	—	—	—	—	72 13 8	6283
16	—	—	—	5 7 4	—	—	—	—	—	73 9 8	6235
—	—	—	—	—	17	—	10	—	20 17 2	67 28 4	6012
—	—	—	—	—	8	7	5	2	20 14 11	56 23 4	6025
19	11	—	—	10 8 4	—	—	—	—	—	55 17 2	6286
—	—	—	—	—	12	12	18	2	56 11 4	126 3 2	6145
5	6	—	—	3 3 2	—	—	—	—	—	20 1 9	6240
21	14	—	—	10 11 2	—	—	—	—	—	110 18 5	6157
—	—	—	—	—	19	13	15	5	45 7 8	101 5 0	6008
—	—	—	—	—	—	—	—	—	—	249 14 8	6191
—	—	—	—	—	—	—	6	—	9 11 10	16 1 9	6469
12	8	2	—	5 15 10	—	—	—	—	—	20 15 10	6465
20	17	—	—	15 12 7	—	—	—	—	—	111 12 5	6132
—	—	—	—	—	—	—	—	—	—	27 18 2	6749
21	—	—	—	5 6 2	—	—	—	—	—	56 2 1	6219
—	—	—	—	—	—	—	3	1	8 15 0	41 10 7	6255
10	5	2	—	6 13 0	—	—	—	—	—	56 8 4	6081
10	7	—	—	12 8 2	—	—	—	—	—	110 14 7	6091
—	—	—	—	—	—	—	—	—	—	57 8 19	6113
6	2	—	—	2 10 3	—	—	—	—	—	18 2 10	6742
12	14	—	—	11 10 11	—	—	—	—	—	102 12 2	6226
32	4	—	—	7 7 6	—	—	—	—	—	175 16 0	6017
27	12	24	4	27 12 4	—	—	—	—	—	485 15 7	6013
17	—	—	—	5 5 1	—	—	—	—	—	88 2 7	6304
—	—	—	—	—	—	—	—	—	—	106 12 7	6044

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCHOOLS.				Amount of Grant.	DRAWING.				Amount of Grant.
		No. of Students recognised for Grant.					No. of Students recognised for Grant.				
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
	Co. HONOUR OF CUBAN— (continued.)					£ s. d.					£ s. d.
6021	High School, . . . .	17	6	7	1	42 0 4	17	6	—	—	8 11 11
6056	Presentation Brothers' College, . . . .	31	23	11	7	130 16 1	31	23	—	—	12 16 0
6077	Bochale Seminary, . .	18	22	7	5	75 9 2	18	21	—	—	16 13 7
6067	St. Aloysius' School, St. Mary's of the Isle.	24	19	—	—	82 12 11	24	19	4	—	23 19 1
6024	St. Vincent's Convent School, . . . .	43	35	—	—	81 6 7	43	36	8	—	25 8 11
6136	Uxbridge High School, St. Angela's	42	38	—	—	88 6 4	42	38	17	2	40 9 6
	Co. KERRY.										
6124	Dingle Christian Brothers' School, . . . .	18	20	12	—	121 14 4	18	20	—	—	12 11 11
6048	Kilmarney Lourdes Convent, . . . .	34	12	5	3	68 5 2	36	12	—	—	17 9 9
6241	Kilmarney St. Bernard's Seminary, . . . .	19	21	15	—	80 8 7	19	21	—	—	8 10 2
6317	Ladyside St. Michael's College, . . . .	22	20	9	—	92 6 10	22	20	—	—	15 12 11
6170	Trillick Christian Brothers' School, . . . .	44	24	17	—	114 8 10	44	24	—	—	16 4 1
6128	Trillick The Jeffers' Institution, . . . .	33	20	15	1	120 13 1	33	20	—	—	13 1 7
6008	Trillick Presentation Convent, . . . .	11	10	—	—	27 14 5	11	10	5	—	12 2 3
	Co. LIMERICK.										
6099	Beall St. Mary's Convent, . . . .	40	29	—	—	75 9 0	40	29	—	—	24 14 3
6237	Kilfinane Civil Service and Classical School, . . . .	9	8	2	—	33 18 0	9	8	—	—	4 11 0
	Co. ROSSCONELL or LIMERICK.										
6166	Christian Brothers' School, Section I, . . . .	60	47	26	—	227 8 5	60	47	—	—	36 7 9
6283	Christian Brothers' School, Section II, . . . .	25	18	—	—	31 17 8	25	18	—	—	14 2 11
6223	Convent College, . . . .	23	16	11	—	80 19 10	23	19	—	—	9 9 6
6130	Internado School, Rathfriland Street, . . . .	2	6	3	—	13 17 11	2	6	—	—	1 8 9
6172	Levent Hill Convent, . .	32	24	12	—	90 17 8	32	24	—	—	26 0 7
6216	Melmore De Pines' College, . . . .	6	5	—	—	11 4 2	6	5	8	—	3 8 10
6267	Mount St. Alphonsus' School, . . . .	2	2	7	—	19 10 6	2	2	—	—	1 9 8
6097	Mungret College, . . . .	21	22	—	—	41 17 3	21	21	—	—	6 12 1
6151	St. Michael's College, . .	30	19	16	6	97 12 4	30	19	—	—	10 11 4
6067	Villiers' Commercial School for Girls, . . . .	5	4	2	—	15 0 8	5	4	—	—	1 17 1
6014	Villiers' Endowed School, . .	6	7	1	—	15 10 6	6	7	—	—	2 10 6



## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTORS				DOMESTIC ECONOMY				Amount of Grant.	Total Amount of Grants.	No. of School.
No. of Students recognised for Grant.				No. of Students recognised for Grant.						
1st Year.	2nd Year.	3rd Year.	4th Year.	1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.				£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	50 12 3	9031
—	—	—	—	—	—	—	—	—	142 12 1	9035
—	—	—	—	—	7	4	—	8 15 0	100 19 9	9077
—	—	—	—	—	12	4	3	13 17 9	120 9 9	9037
—	—	—	—	—	—	—	—	—	119 15 6	9024
—	—	—	—	—	—	—	—	—	128 15 9	9128
—	—	—	—	—	—	—	—	—	124 6 3	9134
—	—	—	—	—	9	4	—	4 14 3	92 0 3	9048
—	—	—	—	—	—	—	—	—	28 18 0	9341
—	—	—	—	—	—	—	—	—	108 0 0	9317
—	—	—	—	—	—	—	—	—	190 12 11	9176
22	10	—	—	10 14 1	—	—	—	—	134 8 0	9129
—	—	—	—	—	11	12	3	9 13 4	49 12 0	9023
—	—	—	—	—	—	—	—	—	300 3 3	9328
—	—	—	—	—	—	—	—	—	35 9 9	9237
1	8	—	—	3 10 4	—	—	—	—	294 11 9	9190
25	19	—	—	42 19 8	—	—	—	—	55 19 10	9885
—	—	—	—	—	—	—	—	—	90 9 4	9323
—	—	—	—	—	—	—	—	—	14 6 8	9420
—	—	—	—	—	3	4	10	24 10 9	189 18 0	9173
—	—	—	—	—	—	—	—	—	14 23 1	9316
—	—	—	—	—	—	—	—	—	21 9 2	9307
—	—	—	—	—	—	—	—	—	48 9 7	9307
—	—	—	—	—	—	—	—	—	168 3 8	9151
—	—	—	—	—	—	—	—	—	14 17 9	9637
—	—	—	—	—	—	—	—	—	18 1 2	9644

TABLE III.—LIST OF DAY

TABLE III.—LIST OF DATA

No of School	Name of School.	EXPERIMENTAL SCIENCE.					Amount of Grant	DRAWING.				Amount of Grant
		No of Students recognised for Grant.				No of Students recognised for Grant						
		1st Year.	2nd Year.	3rd Year.	4th Year.	1st Year.		2nd Year.	3rd Year.	4th Year.		
	CO. TIPPERSBURY—					£ s d					£ s d.	
0101	Cumock-on-Say Christian Brothers' Schools.	30	18	9	—	64 8 10	30	18	9	—	15 8 8	
0343	Cushel, Christian Brothers' Schools	9	9	—	—	18 4 8	9	9	—	—	6 15 11	
0247	Cushel, Presentation Convent	11	11	—	—	27 11 2	11	11	—	—	17 12 7	
0208	Cushel, Rockwell College.	55	49	33	1	175 1 7	55	49	—	—	30 5 6	
0294	Clonmel Christian Brothers' Schools, St. Mary's.	14	12	5	—	32 1 9	14	12	—	—	16 11 3	
0134	Clonmel Christian Brothers' Schools, St. Peter and Paul	32	24	14	—	77 3 0	31	24	—	—	15 2 4	
0409	Clonmel Grammar School.	12	8	8	—	40 14 0	12	8	—	—	7 11 1	
0229	Coragh Christian Brothers' Schools	18	18	—	—	36 8 3	18	18	—	—	8 14 3	
0100	Thurles Christian Brothers' Schools	28	21	15	—	88 3 10	28	21	—	—	16 8 0	
0148	Thurles Presentation Convent	15	13	—	—	41 7 2	15	13	—	—	14 7 10	
0449	Thurles Ursuline Convent.	40	33	28	—	132 16 0	40	33	—	—	28 2 8	
0183	Tipperrary Christian Brothers' Schools	34	28	17	—	92 12 3	33	28	—	—	13 10 9	
0301	Tipperrary Convent of Mercy.	17	11	—	—	38 5 0	17	11	—	—	9 18 5	
0090	Tipperrary Grammar School.	5	7	3	—	10 18 7	5	7	—	—	8 20 6	
	CO. WATERFORD—											
0302	Cappoquin Mount Mellary Rectory.	38	26	15	—	103 2 0	30	19	—	—	11 8 5	
0214	Dungarvan Christian Brothers' Schools	17	4	3	—	25 9 8	17	4	7	—	8 8 7	
0440	Dungarvan St. Augustine's Rectory.	7	8	5	—	35 9 10	7	8	—	—	3 13 8	
0204	Lisdown Christian Brothers' Schools	7	5	6	—	35 2 0	7	5	5	—	6 1 28	
	CO. ROSCOMMON OR WATERFORD—											
0431	Bishop Foy High School for Boys	7	21	9	—	40 10 0	7	11	—	—	3 12 11	
0157	Municipal Trades Preparatory School.	13	0	—	—	48 8 5	13	6	—	—	8 17 9	
0118	Christian Brothers' Schools, Mount St.	30	17	13	—	81 4 0	30	17	—	—	18 18 2	
0145	Christian Brothers' College, Waterlool.	37	7	16	—	60 4 7	37	7	—	—	10 2 5	
0084	Convent of the Sacred Heart, Ferrybank.	26	18	20	—	96 7 5	26	18	16	2	23 8 2	
0673	Girls' High School.	5	5	—	—	14 1 5	5	5	—	—	8 7 7	
0074	Newtown School.	8	5	4	—	24 11 2	8	5	—	—	5 17 11	
0100	St. Anne's High School, Ursuline Convent	34	22	11	—	93 14 6	34	22	—	—	16 6 1	
	TOTALS FOR MIDDLETOWN.	1,770	1,368	620	68	5,500 14 7	1,770	1,502	158	13	1,672 11 10	

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTITUTION.					DOMESTIC ECONOMY					Total Amount of Grants.	No. of School.
No. of Students recognised for direct.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
29	8	—	—	15 7 10	—	—	—	—	—	87 0 4	6101
9	9	—	—	5 1 7	—	—	—	—	—	10 1 8	6331
—	—	—	—	—	—	—	—	—	—	45 3 9	6137
4	—	—	—	1 13 1	—	—	—	—	—	206 18 2	6208
—	—	—	—	—	—	—	—	—	—	43 13 2	6294
29	—	—	—	7 8 6	—	—	—	—	—	99 13 10	6134
8	10	—	—	6 18 9	—	—	—	—	—	64 4 4	6079
13	16	—	—	9 8 0	—	—	—	—	—	54 11 3	6223
21	12	—	—	10 0 0	—	—	—	—	—	124 13 10	6166
—	—	—	—	—	15	13	—	—	27 14 10	88 9 10	6348
—	—	—	—	—	21	7	9	—	22 17 1	182 48 9	6069
12	15	—	—	10 2 8	—	—	—	—	—	116 5 8	6183
—	—	—	—	—	15	3	—	—	12 9 0	60 18 5	6364
—	—	—	—	—	—	—	—	—	—	23 9 1	6060
—	—	—	—	—	—	—	—	—	—	114 11 2	6308
17	6	4	—	8 9 4	—	—	—	—	—	40 7 4	6214
—	—	—	—	—	—	—	—	—	—	39 8 6	6040
3	4	—	—	2 11 1	—	—	—	—	—	45 14 11	6094
—	—	—	—	—	—	—	—	—	—	50 12 8	6631
13	7	—	—	15 9 10	—	—	—	—	—	18 16 0	6077
43	—	—	—	13 8 8	—	—	—	—	—	108 6 7	6183
—	—	—	—	—	—	—	—	—	—	16 7 0	6445
—	—	—	—	—	15	7	9	1	22 18 7	147 14 2	6084
—	—	—	—	—	—	—	4	4	13 16 0	30 5 0	6451
7	3	—	—	3 17 2	—	—	—	—	—	34 9 3	6074
—	—	—	—	—	15	—	7	—	8 6 0	119 9 7	6190
619	241	33	4	315 17 9	158	90	164	24	344 17 3	7,530 1 0	

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCIENCE.					DRAWING.				
		No. of Students registered for Grant.				Amount of Grant	No. of Students registered for Grant.				Amount of Grant.
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
	ELSTERH					£ s. d.					£ s. d.
6798	Co. ARMISTE: Intermediate School	12	11	—	—	29 1 1	12	11	2	—	8 12 1
6119	Ballymore Academy, .	59	41	22	—	178 10 10	59	41	—	—	22 14 1
6244	Ballymore Intermediate School.	21	15	—	—	87 10 3	21	15	7	—	22 2 10
6681	Carriefforgue Ladies' Collegiate School	8	6	5	—	32 13 7	8	6	5	—	11 12 4
6499	Larne Grammar School,	13	7	7	6	55 10 10	13	7	—	—	5 0 2
6397	Larne Intermediate School	5	4	—	1	15 17 6	5	4	2	2	9 14 4
6347	Larne: Oval Collegiate School.	3	—	—	—	2 11 3	3	—	—	—	0 13 1
6028	Lisburn: Convent of the Sacred Heart of Mary.	11	8	—	—	34 7 11	11	8	3	—	11 13 3
6164	Lisburn: Intermediate School.	13	12	11	—	80 6 9	13	12	—	—	6 2 0
6115	Lisburn: Ulster Provincial School	9	9	—	—	31 23 10	9	9	8	—	15 19 2
6080	Co. BOLTON OF BELFAST: Christian Brothers' Schools, St. Mary's	42	33	14	—	119 13 9	42	33	—	—	14 9 0
6286	Christian Brothers' Schools, St. Patrick's	28	24	—	—	68 14 3	28	24	—	—	16 8 1
6483	Christian Brothers' Trades Preparatory School.	68	58	15	—	875 10 7	52	35	15	—	71 5 2
6175	Collegiate School, Brookvale Avenue.	17	11	2	2	41 8 11	17	11	2	—	10 19 7
6181	Gale's Collegiate School, Mount Pleasant.	8	8	—	—	23 8 4	8	8	1	—	11 12 7
6185	Malshurst College, Alexandra Gardens	4	3	1	—	9 10 0	4	3	1	—	3 13 6
6092	Manorville College, .	28	16	15	—	122 0 2	21	16	—	—	11 5 5
6218	Methodist College, .	49	31	8	—	145 16 9	49	31	—	—	16 4 8
6081	Municipal Trades Preparatory School	81	43	14	—	520 13 1	81	43	14	—	145 17 9
6186	Princess Gardens School, .	28	11	6	3	58 11 6	22	11	5	3	21 3 9
6118	Rosetta High School,	6	4	—	—	12 17 10	6	4	2	1	5 7 0
6032	Royal Academical Institution.	131	79	16	5	449 18 1	121	70	—	—	58 15 10
6440	Royal Academy, .	27	17	9	4	120 12 4	27	17	—	—	13 10 4
6095	St. Melachy's College, .	38	15	5	—	72 16 3	28	15	—	—	12 16 9
6254	St. Mary's Dominican Convent,	19	18	—	—	31 10 2	19	16	0	—	18 5 3
6071	Victoria College, .	40	21	6	2	97 9 5	40	21	8	1	37 6 7
6300	Co. ANTRIM: Armagh Christian Brothers' Schools.	12	9	3	—	38 4 4	12	9	—	—	5 14 4
6455	Armagh: Royal School, .	31	13	5	2	61 8 4	30	13	—	—	12 4 6
6058	Lurgan College, .	13	9	3	3	38 9 1	13	9	—	—	4 13 2

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.				DOMESTIC ECONOMY.					Total Amount of Grants.	No. of School	
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.						Amount of Grant.
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	37 13 2	6796
—	—	—	—	—	—	—	—	—	—	262 4 11	6119
12	5	—	—	8 7 7	9	11	7	—	19 11 4	167 18 0	6844
—	—	—	—	—	—	—	—	—	—	44 5 11	6431
—	—	—	—	—	—	—	—	—	—	60 11 0	6499
—	—	—	—	—	4	3	4	—	5 11 8	31 3 4	6237
—	—	—	—	—	—	—	—	—	—	4 4 4	6847
—	—	—	—	—	11	2	6	5	7 9 10	63 11 0	6068
—	—	—	—	—	—	—	—	—	—	86 8 9	6194
—	—	—	—	—	—	—	—	—	—	55 19 4	6114
—	—	—	—	—	—	—	—	—	—	154 1 9	6080
—	—	—	—	—	—	—	—	—	—	85 2 4	6250
99	38	15	—	83 16 5	—	—	—	—	—	532 12 2	6985
—	—	—	—	—	—	—	—	—	—	51 14 6	6175
—	—	—	—	—	—	—	—	—	—	34 15 11	6184
—	—	—	—	—	—	—	—	—	—	13 12 6	6185
—	—	—	—	—	—	—	—	—	—	130 5 7	6192
—	—	—	—	—	—	—	—	—	—	169 1 5	6218
81	43	14	—	145 16 1	—	—	—	—	—	815 0 11	6984
—	—	—	—	—	—	—	—	—	—	70 15 3	6186
—	—	—	—	—	—	—	—	—	—	18 1 10	6328
—	—	—	—	—	—	—	—	—	—	696 18 11	6002
—	—	—	—	—	—	—	—	—	—	124 2 8	6049
—	—	—	—	—	—	—	—	—	—	85 18 6	6065
—	—	—	—	—	—	—	—	—	—	60 15 5	6164
—	—	—	—	—	—	—	6	4	12 9 11	146 16 11	6071
—	—	—	—	—	—	—	—	—	—	43 18 8	6200
—	—	—	—	—	—	—	—	—	—	78 12 10	6055
—	—	—	—	—	—	—	—	—	—	41 8 3	6063

TABLE III.—LIST OF DAY

No. of School	Name of School	EXPERIMENTAL SCIENCE.				DRAWING			
		No. of Students recognised for Grant.				No. of Students recognised for Grant.			
		1st Year.	2nd Year.	3rd Year.	4th Year.	1st Year.	2nd Year.	3rd Year.	4th Year.
	Co. ARMSM—(continued.)								
					£ s. d.				£ s. d.
5871	Portsmouth: Alexandra School.	7	—	—	7 12 3	7	—	—	1 1 5
5861	Portsmouth: Day Trade Preparatory School.	14	3	—	45 14 7	14	3	—	11 3 3
5828	Portsmouth: Intermediate School.	5	4	—	12 9 8	5	4	—	1 19 10
5853	Portsmouth: Ladies' School.	18	6	—	32 4 0	18	6	2	8 14 2
	Co. CAVAN:								
5931	Cavan: Royal School.	8	11	2	32 10 1	8	11	—	7 5 10
5126	Cavan: St. Patrick's College.	34	19	15	96 13 4	34	19	—	10 16 5
	Co. DUBLIN:								
5272	Lettistown: Loreto Convent.	19	6	—	36 3 4	19	6	6	16 2 11
5857	Lettistown: St. Eugene's College.	22	19	19	67 14 0	22	19	—	11 4 14
5952	Lifford: Prior School.	15	14	6	57 13 0	15	14	—	13 16 3
5957	RAF: Royal School.	15	19	15	115 13 1	15	19	—	9 18 5
	Co. DOWY:								
5236	Down: Academical Institution.	29	22	3	53 6 5	29	22	—	5 19 7
5936	Down: Rossmore Academy.	5	10	1	38 9 9	5	10	—	4 11 9
5857	Down: Redwood School.	17	13	6	43 0 0	17	13	—	6 7 7
5836	Down: Glenties School.	6	4	1	14 9 8	6	4	—	4 1 1
5226	Down: Ladies' Collegiate School.	3	4	2	15 10 2	3	4	—	2 5 0
5222	Down: Ladies' School, Drogheda.	5	3	3	16 6 7	5	3	—	3 18 19
5975	Holywood: Upper Sullivan School.	39	14	14	113 18 5	39	14	8	39 7 39
5171	Newry: Christian Brothers' School.	27	19	18	56 16 3	27	19	—	8 16 0
5203	Newry: Intermediate School.	12	16	—	36 11 7	12	15	—	7 10 5
5962	Newry: St. Columba's College.	6	9	6	32 9 7	6	6	6	10 2 9
5956	Newry: St. Columba's School.	1	5	—	8 6 3	1	5	—	2 5 3
	Co. FINGAL:								
5939	Fingal: Porton Royal School.	13	17	12	70 13 2	13	17	—	8 11 2
5275	Fingal: St. Michael's Intermediate School.	19	8	9	46 26 3	19	8	—	6 6 5
	Co. LONDONDERRY:								
5135	Londonderry: Academical Institution.	14	26	17	109 15 10	14	26	3	29 14 2
5436	Londonderry: Gordonville High School.	29	9	—	35 7 3	29	8	—	12 11 11
5495	Londonderry: Ursuline Convent.	19	—	—	13 11 0	19	—	—	5 18 2
5286	Londonderry: Rosbank School.	7	1	—	9 0 0	7	1	1	10 13 5

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.					DOMESTIC ECONOMY.					Total Amount of Grants.	No. of Schools.
No. of Students receiving for Grant.				Amount of Grant.	No. of Students receiving for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
—	—	—	—	£ s. d.	7	—	—	—	£ s. d.	£ s. d.	
14	8	—	—	16 16 5	—	—	—	—	2 0 0	10 18 8	6871
—	—	—	—	—	—	—	—	—	—	73 14 3	6881
—	—	—	—	—	—	—	—	—	—	14 9 6	6883
—	—	—	—	—	—	—	—	—	—	40 18 9	6883
—	—	—	—	—	—	—	—	—	—	39 15 11	6181
—	—	—	—	—	—	—	—	—	—	307 9 9	6126
—	—	—	—	—	19	6	3	4	26 0 6	78 6 9	6278
—	—	—	—	—	—	—	—	—	—	78 14 10	6807
—	—	—	—	—	—	—	—	—	—	71 7 2	6668
—	—	—	—	—	—	—	—	—	—	125 12 6	6687
—	—	—	—	—	—	—	4	—	2 17 7	64 14 10	6396
—	—	—	—	—	—	—	—	—	—	85 1 6	6698
—	—	—	—	—	—	—	—	—	—	49 7 7	6657
—	—	—	—	—	—	—	—	—	—	18 10 1	6126
—	—	—	—	—	—	—	—	—	—	15 15 11	6396
—	—	—	—	—	—	—	—	—	—	20 5 3	6222
16	—	—	—	5 19 8	—	—	—	—	—	139 4 11	6075
—	—	—	—	—	—	—	—	—	—	65 10 2	6171
4	5	—	—	3 9 8	10	8	—	—	6 7 5	53 19 1	6263
—	—	—	—	—	—	—	—	—	—	62 12 4	6692
—	—	—	—	—	—	—	—	—	—	30 11 6	6896
—	—	—	—	—	—	—	—	—	—	82 4 5	6189
—	—	—	—	—	—	—	—	—	—	53 2 8	6578
—	—	—	—	—	—	—	—	—	—	129 10 0	6235
—	—	—	—	—	—	—	—	—	—	68 10 2	6136
—	—	—	—	—	—	—	—	—	—	24 0 3	6885
—	—	—	—	—	—	—	—	—	—	19 17 5	6283

TABLE III.—LIST OF DAY

TABLE III.—LIST OF SCHOOLS.

No. of School	Name of School	EXPERIMENTAL SCIENCE.				Amount of Grant.	DRAWING.				Amount of Grant.
		No. of Students recognised for Grant					No. of Students recognised for Grant				
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
4730	CO. LONDONDERRY—(cont.) Macquinn's Intermediate School, Coleraine.	12	7	—	—	£ s. d. 38 1 8	12	7	5	—	£ s. d. 8 15 9
4588	McGheriff's Nursery Endowed School.	19	12	1	—	45 16 5	19	12	1	—	11 2 8
	CO. DUBLIN OF LONDON- DERRY.										
6086	Christina Brothers' School, Barns-of-the-Bell.	25	14	1	—	78 12 3	25	14	—	—	13 19 10
6446	Convent of Our Lady of Mercy.	24	12	1	1	85 2 6	24	12	—	—	16 1 2
6044	Ford's College.	35	20	18	4	123 18 0	35	20	—	—	24 12 2
6140	St. Columba's College.	7	10	10	4	47 14 1	7	10	—	—	5 2 6
6075	St. Lancelot's College.	14	8	—	—	24 11 6	14	8	1	—	6 14 3
6100	Strand House School.	47	25	20	6	246 2 7	47	25	—	—	40 6 10
6054	Victoria High School.	43	34	16	17	388 10 0	43	34	15	14	66 11 4
	CO. MONAGHAN.										
6223	Carmichael's : St. Louis' Convent.	15	18	14	5	151 11 3	15	18	—	—	16 1 8
6213	Carmichael's : Vincent Weymouth's Grammar School.	7	6	4	—	24 6 10	7	6	—	—	2 8 4
6193	Monaghan : Christian Brothers' School.	19	5	6	—	32 11 1	19	5	—	—	6 12 9
6225	Monaghan : St. Louis' Con- vent.	38	25	—	10	171 11 6	38	25	—	—	20 8 0
6076	Monaghan : St. Macartin's Bursary.	14	21	13	5	88 11 5	14	21	—	—	8 5 8
	CO. TIBERON.										
6022	Cookstown Academy.	12	5	6	—	48 14 9	12	5	—	—	7 13 2
4128	Cookstown : Ladies' School.	19	9	—	—	40 12 9	19	9	2	5	14 19 3
6006	Dungannon Girls' School.	12	10	4	—	37 14 11	12	10	—	—	7 1 8
6231	Dungannon Royal School.	23	20	9	2	91 10 0	23	20	—	—	13 12 11
6000	Dungannon : St. Patrick's Academy.	28	6	4	—	39 12 8	28	6	—	—	5 19 10
6676	Omagh Academy.	26	8	4	—	41 17 4	26	8	—	—	5 14 8
6180	Omagh : Christian Brothers' School.	19	13	7	5	69 8 4	19	12	—	—	8 7 4
6082	Omagh High School.	9	10	5	—	35 15 7	9	10	6	1	11 8 2
6211	Omagh : Loreto Convent.	13	10	10	—	72 2 8	13	10	6	2	12 5 5
	TOTALS FOR USTER.	1,430	1,068	484	104	6,205 1 11	1,430	1,068	199	33	1,382 7 11
	CO. GALWAY.										
6636	Bellawake : St. Joseph's College.	18	13	8	6	87 6 10	18	13	—	—	8 15 8
6606	Galway : Dominican College.	10	9	1	—	24 12 8	10	9	1	1	6 2 4
6667	Galway : Dominican Con- vent, Taylor's Hill.	12	11	4	—	36 2 3	12	11	5	—	12 11 9



## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.				DOMESTIC ECONOMY.					Total Amount of Grants.	No. of School.	
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.						Amount of Grant.
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
—	—	—	—	£ s. d.	—	—	—	—	£ s. d.	£ s. d.	
—	—	—	—	—	—	2	—	—	—	57 19 1	6388
24	15	—	—	16 15 5	—	—	—	—	—	199 7 4	6388
—	—	—	—	—	—	—	—	—	—	181 3 8	6389
—	—	—	—	—	—	—	—	—	—	158 5 11	6394
—	—	—	—	—	—	—	—	—	—	52 16 7	6490
—	—	—	—	—	—	—	—	—	—	31 5 9	6473
—	—	—	—	—	—	—	—	—	—	289 9 5	6109
—	—	—	—	—	—	—	—	—	—	455 7 4	6368
—	—	—	—	—	16	17	14	4	80 2 10	247 15 6	6254
—	—	—	—	—	—	—	—	—	—	28 15 2	6213
19	5	—	—	8 1 7	—	—	—	—	—	48 5 5	6196
—	—	—	—	—	11	—	10	9	64 8 7	296 8 1	6223
—	—	—	—	—	—	—	—	—	—	94 17 1	6078
—	—	—	—	—	—	—	—	—	—	54 9 11	6322
—	—	—	—	—	—	—	—	—	—	35 12 0	6158
—	—	—	—	—	—	—	—	—	—	44 16 7	6306
—	—	—	—	—	—	—	—	—	—	105 2 14	6251
—	—	—	—	—	—	—	—	—	—	45 12 6	6090
—	—	—	—	—	—	—	—	—	—	50 12 2	6076
—	—	—	—	—	—	—	—	—	—	77 15 8	6189
—	—	—	—	—	—	—	—	—	—	47 1 9	6083
—	—	—	—	—	—	—	7	3	16 2 3	196 13 2	6211
250	109	29	—	280 15 10	87	90	72	28	233 1 11	7,940 7 7	
—	—	—	—	—	—	—	—	—	—	96 0 6	6039
—	—	—	—	—	11	—	2	6	13 4 0	44 5 0	6009
—	—	—	—	—	—	—	5	3	59 2 10	61 16 10	6097

TABLE III.—LIST OF DAY

No. of School	Name of School.	EXPERIMENTAL SCIENCE					DRAWING.				
		No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.
		1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.	
						£ s. d.					£ s. d.
6242	C.O. GALWAY—(continued.) Galway Grammar School,	7	5	2	2	24 7 7	7	5	—	—	8 1 4
6265	Galway: St. Ignace's College,	15	10	—	—	33 12 3	15	10	—	—	6 16 10
6276	Galway: St. Joseph's Seminary,	15	15	—	—	24 18 5	15	15	—	—	8 13 9
6220	Town: Christian Brothers' Schools,	30	30	—	—	68 4 3	30	30	4	—	19 15 8
6527	Town: St. Barth's College	32	32	35	4	155 12 9	32	32	—	—	8 6 2
6258	Co. Mayo: Ballina: St. Mardach's College,	33	24	9	—	91 10 0	33	24	—	—	10 18 9
6202	Kilmeagh: St. Louis' Convent.	24	22	14	1	125 9 11	26	22	3	—	24 3 8
6373	Westport: Christian Brothers' Schools,	13	14	9	—	60 11 3	13	14	—	—	7 17 0
6245	Co. Roscommon: Bellaghsdoran: Diocesan College	11	15	10	—	55 17 10	13	15	—	—	9 7 5
6292	Co. Sligo: Sligo: Grammar School, -	18	13	3	—	117 1 10	18	13	—	—	3 13 3
6193	Sligo: Intermediate School,	9	4	—	—	23 9 5	9	4	1	—	6 10 2
6141	Sligo: Summerhill College,	36	36	26	7	223 17 3	36	36	—	—	21 9 5
6018	Sligo: Trades Preparatory School,	5	5	—	—	35 7 6	5	5	—	—	12 5 2
6237	Sligo: Ursuline Convent,	42	24	6	—	145 17 0	42	34	—	—	35 9 8
	TOTALS FOR CONNAUGHT,	319	272	134	22	1,320 5 10	319	272	14	1	312 0 10
	Totals for Ennislet, . . . (123 Schools)	2,468	1,764	795	158	8,125 9 8	2,468	1,764	162	19	1,583 2 2
	Totals for Monaster, . . . (80 Schools)	1,770	1,303	659	66	5,996 14 7	1,770	1,303	128	13	1,072 11 10
	Totals for Ulster, . . . (79 Schools)	1,630	1,068	484	104	6,205 1 11	1,630	1,068	149	33	1,161 7 11
	Totals for Connaught, . . . (17 Schools)	319	272	134	22	1,320 5 10	319	272	14	1	312 0 10
	TOTALS FOR IRELAND, (236 Schools).	6,127	4,367	2,072	350	21,247 12 0	6,127	4,364	453	66	3,866 2 9

## SECONDARY SCHOOLS, &amp;c.—continued.

MANUAL INSTRUCTION.					DOMESTIC ECONOMY.					Total Amount of Grant.	No. of School.
No. of Students recognised for Grant.				Amount of Grant.	No. of Students recognised for Grant.				Amount of Grant.		
1st Year.	2nd Year.	3rd Year.	4th Year.		1st Year.	2nd Year.	3rd Year.	4th Year.			
				£ s. d.					£ s. d.	£ s. d.	
—	—	—	—	—	—	—	—	—	—	27 11 11	6242
—	—	—	—	—	—	—	—	—	—	30 9 1	6305
15	15	—	—	8 19 6	—	—	—	—	—	42 10 8	6076
19	18	—	—	15 7 11	—	—	—	—	—	108 8 3	6220
3	12	—	—	6 9 4	—	—	—	—	—	169 8 3	6327
5	3	—	—	3 10 0	—	—	—	—	—	105 7 0	6258
—	—	—	—	—	—	—	4	—	5 12 0	153 5 7	6203
17	14	—	—	10 10 1	—	—	—	—	—	78 18 9	6279
7	8	—	—	5 5 6	—	—	—	—	—	67 10 9	6245
—	—	—	—	—	—	—	—	—	—	126 0 1	6299
—	—	—	—	—	—	—	—	—	—	27 19 7	6193
10	10	—	—	8 18 1	—	—	—	—	—	253 19 9	6141
8	8	—	—	17 18 2	—	—	—	—	—	68 8 10	6098
—	—	—	—	—	20	18	—	—	22 27 1	204 2 4	6197
83	84	—	—	76 0 7	31	15	+ 11	9	50 15 11	1,659 3 8	
629	349	54	1	434 0 7	157	51	202	27	451 9 11	10,538 2 4	
510	241	32	4	315 17 9	178	90	104	24	344 17 3	7,330 1 5	
220	102	29	—	296 15 10	87	50	72	28	283 1 11	3,940 7 7	
81	85	—	—	76 0 7	31	15	11	9	50 15 11	1,659 3 8	
1,439	694	116	5	1,120 14 9	463	206	389	118	1,100 5 0	27,467 14 6	

TABLE IV.—LIST OF PRIMARY SCHOOLS showing the Grants paid by the Department during the Financial Year, 1st April, 1909—31st March, 1910, in respect of Instruction in Drawing and Manual Work.

No. of School	Name of School	School Year ending	Grant for Drawing Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of Scholars under Instruction.	Amount of Grant.	
	LEINSTER.			£ s. d.		£ s. d.	£ s. d.
	CO. CARLOW.						
6170	Carlow: Christian Brothers' Schools.	31.1.10	229	22 12 0	—	—	22 12 0
6260	Carlow: Convent of Mercy.	31.1.10	22	2 4 0	—	—	2 4 0
	CO. DUBLIN.						
6284	Arden: Industrial School.	31.12.09	778	77 16 9	169	55 16 7	133 12 7
6503	Blackrock: North Industrial School.	31.1.10	104	7 16 0	—	—	7 16 0
6527	Corkinock: Morgan's Endowed School.	31.1.10	8 (a)	1 7 6	—	—	1 7 6
6156	Kingsdown: Christian Brothers' Schools.	31.1.10	588	18 28 9	—	—	18 28 9
6027	Monksdown: Carrigis Park Industrial School.	31.12.09	151	15 2 0	41	17 8 8	32 4 5
	CO. DUNDALK & DUBLIN.						
6366	Christian Brothers' Schools, Francis Street.	31.1.10	322	32 4 0	—	—	32 4 0
6045	Christian Brothers' Schools, Golden Bridge.	31.1.10	114	8 11 0	—	—	8 11 0
6040	Christian Brothers' Schools, Great Strand Street.	31.12.09	240	24 0 0	28	6 3 10	30 3 10
6162	Christian Brothers' Schools, James's Street.	31.1.10	321	32 2 0	—	—	32 2 0
6229	Christian Brothers' Schools, Meena.	31.12.09	221	22 2 0	—	—	22 2 0
6130	Christian Brothers' Schools, North Brunswick Street.	31.1.10	251	18 16 6	—	—	18 16 6
6156	Christian Brothers' Schools, North Richmond Street.	31.12.09	318	34 16 0	30	10 4 10	45 0 10
6330	Christian Brothers' Schools, St. Laurence O'Toole.	31.12.09	172	17 4 9	21	6 19 10	24 3 10
6359	Christian Brothers' Schools, St. Mary's Place.	31.12.09	266	26 16 0	19	5 6 5	32 3 5
6117	Christian Brothers' Schools, Spurge Street.	31.1.10	405	40 10 0	—	—	40 10 0
6541	Christian Brothers' Schools, Westland Row.	31.1.10	307	23 0 6	—	—	23 0 6
6125	O'Brien Institution.	31.10.09	88	8 16 0	—	—	8 16 0
6125	St. Vincent's Orphanage.	31.5.09	49 (a)	3 7 5	23	6 11 6	9 18 11
	CO. KILDARE.						
6217	Athy: Christian Brothers' Schools.	31.1.10	139	13 18 0	—	—	13 18 0
6348	Athy: St. Mary's School, Convent of Mercy.	31.1.10	14	1 10 0	—	—	1 10 0
6501	Kilcock: Christian Brothers' Schools.	31.1.10	75	5 14 0	—	—	5 14 0
6555	Monasterevan: Christian Brothers' Schools.	31.1.10	92	9 4 0	—	—	9 4 0
6221	Noss: Christian Brothers' Schools.	31.1.10	101	5 1 0	—	—	5 1 0

(a) 11 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Deneig. Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Deneig and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of Scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
	CO. KIRKBY:						
6304	Calton Christian Brothers' Schools.	31.1.10	102	7 13 0	—	—	7 13 0
6309	Kilnsey Christian Brothers' Schools.	31.1.10	188	11 17 0	—	—	11 17 0
6320	Thorncliffe St. Michael's Convent	31.1.10	23	1 10 0	—	—	1 10 0
	CO. LOYD:						
6106	Droghda Christian Brothers' Schools, Sunday Gate.	31.10.09	147	14 14 0	—	—	14 14 0
6289	Droghda Christian Brothers' Schools, Westgate.	31.10.09	76	6 14 0	—	—	6 14 0
6173	Droghda Christian Brothers' Schools.	31.1.10	286	21 9 0	—	—	21 9 0
	CO. MEATH:						
6108	Kells Christian Brothers' Schools.	31.10.09	122	12 4 0	—	—	12 4 0
	QUEEN'S COTWAY						
6170	Kilbarnock Christian Brothers' Schools.	31.1.10	181	18 11 6	20	7 4 0	20 15 6
6302	Portlinton Christian Brothers' Schools	31.12.09	105	7 17 6	—	—	7 17 6
	CO. WESTGLACE						
6061	Mulling Christian Brothers' Schools.	30.11.09	182	13 13 0	—	—	13 13 0
	CO. WEXFORD:						
6284	Enniscorthy Christian Brothers' Schools	31.1.10	230	11 10 0	—	—	11 10 0
6300	Gorey Christian Brothers' Schools	31.1.10	117	8 15 6	—	—	8 15 6
6181	New Ross Christian Brothers' Schools	31.1.10	142	14 16 0	—	—	14 16 0
6258	Wexford Christian Brothers' Schools, George's street.	31.1.10	97	9 14 0	—	—	9 14 0
6341	Wexford Christian Brothers' Schools, Joseph Street.	31.1.10	138	17 16 0	—	—	17 16 0
	TOTAL FOR LINNETH.		7,212	499 4 5	350	115 9 5	764 12 10
	MUNSTER.						
	CO. CLARE:						
6137	Ennis Christian Brothers' Schools.	30.9.09	131	9 16 6	—	—	9 16 6
6253	Ennis Christian Brothers' Schools.	30.9.09	78	5 17 0	—	—	5 17 0
6295	Kilrush Christian Brothers' Schools.	30.9.09	94	7 1 0	—	—	7 1 0
	CO. COKE						
6296	Charleville Christian Brothers' Schools	31.1.10	45	4 17 6	—	—	4 17 6
6315	Clonality St. Mary's Industrial School.	30.9.09	79	7 15 0	—	—	7 15 0

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Drawing. Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of Scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
	Co. Cork—(continued.)						
6240	Donnybrook, Christian Brothers' School.	31.12.09	65	3 5 0	—	—	3 5 0
6107	Fernoy, Christian Brothers' School.	31.1.10	146	30 19 0	—	—	10 19 0
6131	Midleton, Christian Brothers' School.	31.1.10	187	14 0 6	—	—	14 0 6
6110	Mitchelstown, Christian Brothers' School.	31.1.10	81	6 1 6	—	—	6 1 6
6680	Upton, Donnybrook Industrial School.	31.12.09	235	19 10 0	56	21 8 5	40 12 5
6328	Youghal, Christian Brothers' School.	31.1.10	170	13 4 0	—	—	13 4 0
	Co. DUBLIN or CORK:						
6332	Christian Brothers' School, Marney Street.	31.5.09	172	19 16 0	33	2 15 0	15 13 0
6015	Christian Brothers' School, Our Lady's Mount.	31.5.09	479	47 18 0	102	20 30 4	68 8 4
6384	Christian Brothers' School, Sullivan's Quay.	31.5.09	254	22 8 0	30	5 17 6	31 5 6
6884	Greenmount Industrial School.	31.5.09	166	(a) 11 5 3	42	14 3 6	25 11 9
	Co. KERRY.						
6154	Daigle, Christian Brothers' School.	31.1.10	122	14 8 0	—	—	14 8 0
6179	Trillick, Christian Brothers' School.	31.1.10	135	18 10 0	—	—	18 10 0
6348	Trillick, St. Joseph's Industrial School.	31.1.10	91	9 2 0	20	4 13 8	13 15 8
	Co. LIMERICK:						
6134	Doon, Christian Brothers' School.	31.1.10	51	6 2 0	—	—	6 2 0
6135	Glin District Industrial School.	31.1.10	169	10 28 0	33	18 3 10	24 1 10
	Co. ROSCOMMON or LONGFORD:						
6403	Christian Brothers' School, St. John's.	31.1.10	180	18 0 0	—	—	18 0 0
6394	Christian Brothers' School, St. Mary's.	31.1.10	194	19 8 0	—	—	19 8 0
6305	Christian Brothers' School, St. Michael's.	31.1.10	113	8 9 6	—	—	8 9 6
6190	Christian Brothers' School, Scoton Street.	31.1.10	180	28 10 0	—	—	28 10 0
6336	Industrial School, Scoton Street.	31.1.10	169	14 18 0	40	17 19 0	24 17 0
	Co. TYPHERARY.						
6044	Our Lady-on-Side, Christian Brothers' School, St. Mary's.	31.12.09	96	9 12 0	—	—	9 12 0
6104	Cumshingaugh, Christian Brothers' School, St. Nicholas.	31.12.09	92	9 4 0	—	—	9 4 0

(a) 11 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of Scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6300	CO. TIPPERARY—(continued.) Carmichael's—Convent of Mercy.	31.12.09	27	2 14 0	—	—	2 14 0
6301	Catted: Christian Brothers' Schools.	31.12.09	75	5 9 4	—	—	5 9 4
6324	Clonmel: Christian Brothers' Schools, St. Mary's.	31.12.09	124	9 4 0	—	—	9 4 0
6134	Clonmel: Christian Brothers' Schools, SS. Peter and Paul.	31.12.09	161	12 1 6	—	—	12 1 6
6229	Kearagh: Christian Brothers' Schools.	31.12.09	145	11 2 0	—	—	11 2 0
6166	Thurles: Christian Brothers' Schools.	31.12.09	202	15 3 0	—	—	15 3 0
6183	Tipperary: Christian Brothers' Schools.	31.1.10	166	12 9 0	—	—	12 9 0
6214	CO. WATERFORD: Dungarvan: Christian Brothers' Schools.	31.12.09	156	11 14 0	—	—	11 14 0
6204	Lismore: Christian Brothers' Schools.	31.12.09	90	6 15 0	—	—	6 15 0
6291	Ystrad: Christian Brothers' Schools.	31.12.09	81	6 2 0	—	—	6 2 0
6138	CO. DUBLIN OF WATERFORD: Christian Brothers' Schools, Harriet Road.	31.12.09	381	24 38 4	112	17 17 8	42 13 8
6294	Christian Brothers' Schools, St. John's.	31.12.09	171	12 16 6	—	—	12 16 6
6292	Christian Brothers' Schools, St. Patrick's.	31.12.09	76	6 14 0	—	—	6 14 0
TOTALS FOR MUNSTER.			4,024	506 6 9	694	118 1 12	624 8 8
ULSTER.							
6472	CO. DUBLIN OF BELFAST: Belfast Industrial School.	30.9.09	347	(a) 15 18 1	113	37 6 5	52 6 4
6296	Christian Brothers' Schools, St. Mary's.	30.9.09	129	(b) 7 17 6	—	—	7 17 6
6280	Christian Brothers' Schools, St. Mary's.	30.9.09	141	(b) 11 15 0	—	—	11 15 0
6296	Christian Brothers' Schools, St. Patrick's.	30.9.09	190	(b) 10 0 0	—	—	10 0 0
6298	Maison Protestant Reformatory.	32.9.09	81	(a) 5 11 10	54	18 2 0	23 13 10
6207	CO. ARMAGH: Armagh: Christian Brothers' Schools.	30.9.09	105	(b) 8 15 0	—	—	8 15 0
6308	CO. DUBLIN: Killybegs: St. Columba's Industrial School.	31.5.09	146	14 12 0	48	23 38 10	38 10 10
6003	CO. DUBLIN OF LONDONDERRY: Christian Brothers' Schools, Brow-of-the-Hill.	31.1.10	120	14 5 0	—	—	14 5 0

(a) 12 months' grant. (b) 18 months' grant.

TABLE IV.—LIST OF PRIMARY SCHOOLS.—continued.

No. of School	Name of School.	School Year ending	Grant for Drawing, Paid on average attendance of scholars		Grant for Manual Instruction.		Total Grant for Drawing and Manual Instruction.
			Average Attendance.	Amount of Grant.	No. of Scholars under Instruction.	Amount of Grant.	
				£ s. d.		£ s. d.	£ s. d.
6186	CO. MONAGHAN: Monaghan: Christian Brothers' Schools.	31.10.09	102	(a) 7 9 3	—	—	7 9 3
6189	CO. TYRONE: Omagh: Christian Brothers' Schools.	30.9.09	82	(b) 10 18 8	—	—	10 18 8
	TOTALS FOR ULSTER.		1,460	106 15 4	315	79 2 3	186 2 7
	CONNAUGHT.						
6227	CO. GALWAY: Galway: Sakshi Industrial School.	31.10.09	302	20 4 0	—	—	20 4 0
6228	Lettistrack: St Joseph's Industrial School.	30.9.09	151	15 2 0	—	—	15 2 0
6229	TEAM: Christian Brothers' Schools.	30.9.09	115	8 12 6	—	—	8 12 6
6338	CO. MAYO: Ballinrobe: Christian Brothers' Schools.	30.9.09	97	7 5 6	—	—	7 5 6
6373	Westport: Christian Brothers' Schools.	30.9.09	157	11 15 6	45	4 4 4	15 19 10
	TOTALS FOR CONNAUGHT.		722	62 19 6	45	4 4 4	67 3 10
	TOTALS FOR LEINSTER (40 Schools).		7,222	448 4 5	359	115 9 5	563 13 10
	TOTALS FOR MUNSTER (40 Schools).		6,925	506 8 0	451	118 1 11	624 8 8
	TOTALS FOR ULSTER (10 Schools).		1,460	106 15 4	315	79 2 3	186 2 7
	TOTALS FOR CONNAUGHT (5 Schools).		722	62 19 6	45	4 4 4	67 3 10
	TOTALS FOR IRELAND (96 Schools).		15,429	1,323 4 0	1,074	317 4 11	1,640 8 11

(a) 11 months' grant. (b) 16 months' grant.



TABLE V.

STATEMENT showing the OCCUPATIONS of STUDENTS attending schools  
and classes conducted under the conditions of Schemes of  
Technical Instruction in Non-Agricultural subjects,



TABLE V.—continued.  
 URBAN SCHEMES—continued.  
 MUNSTER AND CONNAUGHT.

	Cork.	Limerick.	Waterford.	Galway.	Donegal.	Totals for Munster.	Galway.	Sligo.	Totals for Connaught.
Number of individual students enrolled, . . . . .	1,499	738	434	363	236	3,258	382	362	634
Number enrolled in—									
Preparatory Course Classes, . . . . .	111	43	25	41	66	309	43	12	102
Commercial Classes (Including Languages Classes), . . . . .	274	129	89	92	105	679	89	110	134
Science (Pure and Applied) and Mathematics Classes, . . . . .	356	177	70	43	37	693	28	89	117
Handicraft Classes, . . . . .	58	14	36	—	37	145	38	29	97
Domestic Science Classes, . . . . .	324	321	171	76	117	1,009	45	131	174
Art Classes, . . . . .	188	78	49	89	25	421	17	53	80
Classes in Lace and Crochet Making, Embroidery, Sewing, Drawn Thread Work, &c. . . . .	158	94	32	—	—	124	—	—	—
Other Classes, . . . . .	—	35	—	—	—	35	10	—	10
OCCUPATIONS OF STUDENTS.									
Young Men.									
Persons engaged in Farming Occupations, . . . . .	—	—	—	—	—	—	—	—	—
Building Trades, including Workmen in Wood &c. . . . .	70	32	15	16	26	169	15	19	34
Cow and Car Builders, . . . . .	—	1	—	7	1	9	3	1	4
Engineers, Workmen in Metal, Draughtsmen, &c. . . . .	34	41	—	14	9	147	2	—	6
Architects, Surveyors, Civil Engineers, &c. . . . .	32	3	—	—	—	38	—	—	—
Electrical Engineers, Scientific Instrument Makers, &c. . . . .	30	4	—	—	—	34	1	—	1
Printing Trades—Compositors, Lithographers, &c. . . . .	22	17	1	—	4	44	2	33	12
Textile Industries—Designers, Weavers, &c. . . . .	1	10	—	—	—	11	13	—	11
Painters, Decorators, &c. . . . .	25	24	8	3	4	60	4	5	9
Plumbers, Gasfitters, &c. . . . .	24	2	15	1	1	51	—	1	1
Trades involving Applied Art—Jewellers, Purfilers, &c. . . . .	31	9	1	8	—	39	1	3	3
Chemists, Analysts, Druggists, &c. . . . .	38	6	6	—	—	50	1	—	1
Sailors, Shipkeepers, Workmen, &c. . . . .	43	15	17	9	15	109	20	27	47
Clerks in Commercial Offices, . . . . .	134	53	22	9	14	232	10	10	20
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices, . . . . .	30	9	11	5	7	62	—	—	—
Teachers, Assistant Teachers, Pupil Teachers &c. . . . .	24	29	10	5	8	86	6	10	16
Students (University, Law, Medical), . . . . .	10	5	—	—	—	15	3	4	7
Occupations not included in the above Classes, . . . . .	49	43	12	3	2	111	4	31	35
Boys just left School or College, . . . . .	37	6	—	—	8	51	—	—	—
Boys still in attendance at School or College, . . . . .	24	59	20	10	8	129	54	7	61
No occupation stated, . . . . .	63	19	16	18	4	120	—	6	6
Total Number of Young Men, . . . . .	790	387	150	101	114	1,522	137	139	276
Young Women.									
Persons engaged in Farming Occupations, . . . . .	8	—	—	—	—	8	—	—	—
Domestic Servants, . . . . .	19	3	11	6	—	43	8	23	31
Printing Trades, . . . . .	—	—	—	—	14	14	3	—	3
Dressmakers, Milliners, &c. . . . .	35	8	7	9	3	61	—	20	26
Trades Involving—Designers, Weavers, &c. . . . .	—	—	—	—	—	—	10	—	10
Factory Workers not included in above, . . . . .	1	1	—	—	3	3	—	12	12
Workers in Lace, Crochet, Embroidery, &c. . . . .	158	54	—	80	3	295	—	2	2
Sprinklers, Sewing Thread Work, &c. . . . .	—	—	—	—	—	—	—	—	—
Sailors, Shipkeepers, &c. . . . .	78	13	19	36	18	154	9	22	23
Clerks, Cashiers, Civil Servants, &c. . . . .	34	7	16	7	9	73	14	13	27
Teachers, Assistant Teachers, Pupil Teachers &c. . . . .	51	30	15	15	26	137	12	69	81
Students (University, Medical), . . . . .	—	6	—	—	—	6	—	4	4
Occupations not included in above Classes, . . . . .	83	30	5	11	—	67	4	49	50
Girls just left School or College, . . . . .	40	14	—	2	11	67	—	—	—
Girls still in attendance at School or College, . . . . .	19	31	22	63	39	154	34	25	59
No occupation stated, . . . . .	208	128	125	43	16	515	23	16	39
Total Number of Young Women, . . . . .	708	353	275	260	142	1,738	113	223	336
Total Number of Students, . . . . .	1,499	738	434	363	256	3,258	252	362	634

TABLE V.—continued.—URBAN

	Bethel.	Lowlandary.	Newry.	Lisnas (Municipal Scheme).	Lisnas (Current Scheme).	Ballymena.	Portlarn.	Newtownards.	Armagh.
Number of individual students enrolled.	6,784	543	372	342	117	476	382	243	203
Number enrolled in —									
Preparatory Classes.	1,313	79	96	93	36	55	54	66	35
Commercial Classes (including Language Classes).	1,006	75	132	45	11	124	89	61	102
Science (Pure and Applied) and Mathematics Classes.	901	107	30	31	—	125	52	14	14
Handicraft Classes.	418	12	12	—	—	14	—	—	—
Domestic Science Classes.	1,790	252	133	129	33	150	196	100	45
Art Classes.	622	97	29	15	21	70	42	24	6
Classes in Lace and Cloth Making, Knitting, Sewing, Dressmaking, &c.	30	—	—	—	—	24	—	—	—
Other Classes.	488	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS									
Young Men									
Persons engaged in Farming Occupations.	10	1	5	2	—	5	1	—	5
Building Trades, including Workers in Wood, &c.	176	13	10	10	—	5	4	10	12
Cloth and Car Builders.	4	3	—	—	—	3	3	—	—
Engineers, Workers in Metal, Dringhtmen, &c.	470	31	4	22	—	24	30	11	5
Architects, Surveyors, Civil Engineers, &c.	32	8	—	1	—	1	2	—	—
Electrical Engineers, Scientific Instrument Makers, &c.	93	8	—	1	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	66	1	—	1	—	—	—	1	1
Textile Industries—Designers, Weavers, &c.	205	12	1	53	1	5	23	—	3
Painters, Decorators, &c.	40	3	2	2	—	3	—	—	—
Furniture, Upholsters, &c.	49	5	1	1	—	1	1	—	1
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	33	8	—	1	1	2	—	1	1
Chemists, Analysts, Druggists, &c.	52	5	6	1	—	9	1	—	—
Bakers, Shopkeepers, Warehousemen, &c.	264	22	41	10	—	24	13	15	19
Clerks in Commercial Offices.	222	39	15	1	—	10	29	22	5
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	177	5	10	6	—	20	4	1	5
Teachers, Assistant Teachers, Pupil Teachers, &c.	126	16	11	1	—	38	10	3	3
Students (University, Law, Medical).	43	1	—	—	—	1	—	—	—
Occupations not included in the above classes.	115	23	7	6	—	9	1	15	4
Boys just left School or College.	—	—	—	4	—	6	—	2	—
Boys still in attendance at School or College.	34	5	5	22	10	14	8	30	10
No occupation stated.	175	2	12	1	—	—	6	—	2
Total Number of Young Men.	3,045	229	130	153	12	186	175	101	69
Young Women									
Persons engaged in Farming Occupations.	2	—	—	—	—	—	—	—	—
Domestic Servants.	163	20	10	2	4	13	26	6	18
Printers, &c.	6	—	1	—	—	—	—	—	—
Dressmakers, Milliners, &c.	149	15	21	8	3	29	14	6	10
Textile Industries—Designers, Weavers, &c.	89	—	1	20	—	44	44	2	6
Factory Workers not included in above.	212	14	28	30	62	12	9	45	—
Workers in Lace, Cloth, Embroidery, &c.	27	—	—	1	—	1	—	—	—
Spinning, Dressmaking, &c.	78	27	5	5	1	12	11	8	4
Salad-makers, Shopkeepers, &c.	273	35	20	19	5	19	11	14	9
Clerks, Clerks, Civil Servants, &c.	180	13	27	19	13	68	30	25	11
Teachers, Assistant Teachers, Pupil Teachers.	48	1	—	—	—	—	—	—	—
Students (University, Medical).	24	3	33	6	4	5	13	27	1
Occupations not included in above classes.	33	39	20	21	15	27	31	14	23
Girls just left School or College.	—	—	—	—	—	—	—	—	—
Girls still in attendance at School or College.	1,036	119	60	39	5	42	48	—	23
No occupation stated.	—	—	—	—	—	—	—	—	—
Total Number of Young Women.	2,716	379	242	199	105	293	247	147	114
Total Number of Students.	5,761	608	372	342	117	479	322	248	203

## SCHEMES—continued.—DUBLIN.

Cathedral.	Levee.	Dunagee.	Boothbridge.	Carrickfergus.	Edgewood.	Ballynascree (St. Urban and Kesh).	Warrenpoint.	Total for Dublin.	
847	317	258	311	198	192	193	98	10,222	Number of individual students enrolled.
26	29	33	29	42	15	13	24	2,090	Number enrolled in —
75	85	79	62	72	59	38	12	2,118	Preparatory Classes
45	77	37	24	32	32	44	—	1,627	Commercial Classes (including Languages Classes)
33	28	8	1	13	6	—	—	547	Science (Pure and Applied) and Mathematical Classes.
31	25	106	183	49	28	74	48	3,646	Handicraft Classes
39	24	35	—	10	15	24	—	863	Domestic Science Classes
—	32	28	4	—	52	—	—	176	Art Classes
—	—	—	—	—	—	—	—	688	Classes in Lace and Crochet Making, Embroidery, Sewing, Draw-Thread Work, &c.
—	—	—	—	—	—	—	—	—	Other Classes
									OCCUPATIONS OF STUDENTS
									Young Men.
3	2	—	5	2	1	17	2	32	Persons engaged in Farming Occupations.
4	12	6	—	14	—	4	—	34	Engineers, Traders, including Workmen in Wood, &c.
—	—	—	—	—	—	2	—	16	Clerks and Office Boys.
9	14	1	4	15	2	—	—	963	Engineers, Workmen in Metal, Distillers, &c.
2	—	1	—	2	—	—	—	53	Architects, Surveyors, Civil Engineers, &c.
—	4	—	—	—	—	—	—	109	Electrical Engineers, Scientific Instrument Makers, &c.
2	1	—	1	2	1	—	—	77	Printing Trades—Compositors, Lithographers, &c.
6	4	—	13	4	—	—	—	465	Textile Industries—Designers, Weavers, &c.
3	—	2	—	—	—	—	—	61	Painters, Decorators, &c.
1	1	1	—	—	—	—	—	57	Bookbinders, Stationers, &c.
—	6	—	2	2	—	—	—	50	Trades involving Applied Art—Jewellers, Furniture Makers, &c.
1	4	—	5	1	1	—	—	116	Chemists, Analysts, Druggists, &c.
51	15	9	18	5	8	15	6	506	Scientists, Shopkeepers, Workmen, &c.
6	12	12	10	12	—	2	—	257	Clerks in Commercial Offices.
5	5	1	13	5	—	—	—	281	Clerks in Banks, Civil Service, Law, Astronomers and Astronomical Offices.
3	9	4	7	2	2	3	1	240	Teachers, Assistant Teachers, Pupil Teachers, &c.
—	4	1	—	—	1	—	—	58	Students (University, Law, Medical).
17	14	2	4	5	—	24	—	249	Occupations not included in the above Classes.
1	6	—	—	4	—	—	—	23	Boys just left School or College.
22	16	17	17	15	13	—	5	232	Boys still in attendance at School or College.
1	—	5	—	1	2	—	—	208	No occupation stated.
182	180	62	99	92	33	78	20	4,714	Total Number of Young Men.
									Young Women.
11	—	—	—	—	2	—	—	21	Persons engaged in Farming Occupations.
3	12	6	—	3	17	2	4	385	Domestic Servants.
—	—	—	—	1	—	—	—	8	Printing Trades.
8	21	1	8	9	2	13	—	310	Designers, Milliners, &c.
3	5	—	101	2	—	—	—	333	Textile Industries—Designers, Weavers, &c.
1	—	1	—	2	—	—	—	467	Factory Workers not included in above.
—	—	—	—	—	—	—	—	59	Workmen in Lace, Crochet, Embroidery, Sewing, Draw Thread Work, &c.
17	15	4	7	3	5	8	5	235	Scientists, Shopkeepers, &c.
10	20	7	5	10	6	3	—	489	Clerks, Cooks, Civil Servants, &c.
42	33	17	33	14	7	43	2	934	Teachers, Assistant Teachers, Pupil Teachers.
6	—	—	—	—	1	—	—	64	Students (University, Medical).
—	5	2	28	4	7	20	39	293	Occupations not included in above Classes.
—	21	4	13	6	—	—	—	80	Girls just left School or College.
6	10	20	50	15	50	2	8	435	Girls still in attendance at School or College.
18	43	101	5	27	15	—	15	1,412	No occupation stated.
182	167	108	212	101	121	115	72	5,536	Total Number of Young Women.
247	317	258	311	193	192	193	98	14,252	Total Number of Students.

TABLE V.—continued.  
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION,  
LIMERICK.

	Carlow.	Dublin.	Kildare.	Kilkenny.	King's Co.	Lancaster.	Leith.	London.	Manchester.	Queen's Co.	Westmeath.	Wexford.	Wicklow.	Total for Limerick.
Number of individual students enrolled.	106	25	248	237	242	27	320	282	115	154	—	242	1,884	
Number enrolled in —														
Preparatory Course classes.	45	—	19	22	43	—	55	25	21	21	—	54	305	
Commercial Classes (including Languages Classes).	36	—	50	24	50	—	65	38	21	33	—	116	386	
Science (Pure and Applied) and Mathematics Classes.	—	—	15	—	67	—	50	19	6	16	—	28	196	
Handicraft Classes.	32	—	21	37	24	—	16	24	27	28	—	28	225	
Domestic Science Classes.	—	—	61	129	78	—	132	123	44	62	—	61	604	
Art Classes.	—	—	24	—	—	—	—	—	—	—	—	—	24	
Classes in Lace and Crochet Making.	—	25	56	—	—	—	—	74	—	92	—	—	209	
Rubbishery, Springing, Brass Thread Work, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Classes.	—	—	—	—	—	—	—	—	—	—	—	—	—	
CONTINUOUS OF STUDENTS.														
Young Men.														
Persons engaged in Farming Occupations.	9	—	8	3	5	—	—	8	9	1	—	5	43	
Hedging Trades, including Work on Wood &c.	4	—	8	5	15	—	12	6	4	6	—	5	65	
Coch and Gir Builders.	—	—	3	—	5	—	—	—	—	3	—	—	11	
Brassmen, Workers in Metal Manufactures, &c.	3	—	5	26	2	—	26	—	1	3	—	—	66	
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	3	—	2	1	—	—	—	1	6	
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	2	—	—	—	—	—	2	
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	2	—	—	1	—	—	3	
Textile Industries—Designers, Weavers, &c.	3	—	—	19	—	—	—	1	—	1	—	—	23	
Painters, Decorators, &c.	—	—	—	—	2	—	1	—	—	—	—	—	3	
Plumbers, Gasfitters, &c.	—	—	—	—	3	—	1	3	—	1	—	—	7	
Persons involved in Applied Art—Jewellers, Furniture Makers, &c.	1	—	1	8	9	—	1	10	1	—	—	—	31	
Chemists, Analysts, Druggists, &c.	—	—	1	—	—	—	2	—	—	—	—	—	3	
Bakers, Biscuit-makers, Wardensmen, &c.	11	—	14	2	14	—	12	12	8	9	—	—	68	
Clerks in Commercial Offices.	12	—	7	9	14	—	20	11	2	16	—	—	97	
Clerks in Banks, Civil Service, Law, Agriculture, and Amusement Offices.	18	—	7	1	7	—	10	—	4	2	—	—	52	
Teachers, Assistant Teachers, Pupil Teachers, &c.	3	—	4	22	—	—	3	—	2	2	—	—	30	
Students (University, Law, Medical).	—	—	—	—	—	—	20	—	—	—	—	—	20	
Occupations not included in the above classes.	5	—	5	6	14	—	2	2	13	—	—	—	47	
Boys just left School or College.	7	—	2	—	—	—	4	—	1	—	—	—	14	
Boys still in attendance at school or College.	29	—	17	—	68	—	14	1	12	16	—	10	136	
No occupation stated.	—	—	—	3	—	—	3	12	1	4	—	—	23	
Total Number of Young Men.	106	—	79	99	162	—	127	71	58	84	—	86	870	
Young Women.														
Persons engaged in Farming Occupations.	—	—	4	21	—	5	—	6	23	—	—	—	67	
Domestic Servants.	—	—	14	4	14	—	19	27	2	2	—	—	82	
Hedging Trades.	—	—	—	—	—	—	—	—	—	—	—	—	—	
Drummers, Milliners, &c.	—	—	10	5	7	—	22	5	1	1	—	—	50	
Textile Industries—Designers, Weavers, &c.	—	—	22	1	—	—	—	—	—	—	—	—	23	
Workers in Lace, Crochet, Embroidery, Springing, Devere Thread Work, &c.	—	—	58	1	—	10	—	113	—	52	—	—	234	
Salad-makers, Shopkeepers, &c.	—	—	1	6	16	—	12	23	2	1	—	—	64	
Clerks, Cashiers, Civil Servants, &c.	—	—	1	1	4	—	4	2	—	—	—	—	12	
Teachers, Assistant Teachers, Pupil Teachers, Student Teachers, &c.	—	—	7	26	7	—	42	1	9	1	—	—	107	
Occupations not included in above classes.	—	—	—	25	30	—	—	—	—	—	—	—	55	
Girls just left School or College.	—	—	4	4	—	—	9	—	—	—	—	—	17	
Girls still in attendance at school or College.	—	—	12	19	22	—	39	24	7	13	—	—	134	
No occupation stated.	—	—	25	21	19	—	63	3	1	—	—	—	156	
Total Number of Young Women.	—	25	164	114	103	57	208	211	37	79	—	117	1,314	
Total Number of Students.	106	25	243	237	265	57	335	293	115	154	—	259	2,194	

TABLE V.—continued.  
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.  
MUNSTER.

	Class	Cork.	Kerry.	Lincoln.	Tipperary (N.R.)	Tipperary (S.R.)	Tipperary, J.H. (Both and Rural)	Waterford.	Totals for Munster.
Number of individual students enrolled.	337	1,876	69	74	303	154	197	91	2,476
Number enrolled in—									
Preparatory Classes.	—	21	—	—	54	—	59	27	131
Commercial Classes (including Languages, Classes).	246	613	—	—	—	—	49	12	920
Science (Pure and Applied) and Mathematics Classes.	—	151	—	—	23	—	—	—	275
Handicraft Classes.	—	399	—	—	60	96	19	—	483
Domestic Science Classes.	111	57	—	74	—	65	71	3	365
Art Classes.	—	174	—	—	—	8	11	30	223
Classes in Lace and Crochet Making, Bookbinding, Spinning, Draw Thread Work, &c.	—	27	30	22	26	28	8	—	267
Other Classes.	—	—	—	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS									
Young Men.									
Persons engaged in Farming Occupations.	9	89	—	—	27	2	7	2	135
Banking Trades, including Workers in Wood, &c.	5	132	—	—	14	22	—	8	161
Couch and Car Builders.	—	6	—	—	—	—	—	—	6
Engineers, Workers in Metal, Designers, &c.	—	20	—	—	—	—	—	—	20
Architects, Surveyors, Civil Engineers, &c.	—	2	—	—	—	—	—	—	2
Electrical Engineers, Scientific Instrument Makers, &c.	—	3	—	—	—	—	—	—	3
Printing Trades—Compositors, Lithographers, &c.	1	1	—	—	1	—	—	—	3
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Painters, Decorators, &c.	—	14	—	—	—	—	—	1	15
Printers, Gasfitters, &c.	—	2	—	—	—	—	1	—	3
Trades including Applied Art—Jewellers, Furniture Makers, &c.	—	1	—	—	—	—	1	2	4
Chemists, Analysts, Druggists, &c.	—	11	—	—	—	—	1	—	12
Substance, Shipkeepers, Watchmakers, &c.	81	87	—	—	8	—	15	6	197
Clerks in Commercial Offices.	22	49	—	—	—	—	4	9	84
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	4	47	—	—	4	—	—	—	55
Teachers, Assistant Teachers, Pupils Teachers.	11	44	—	—	9	2	3	6	75
Students (University, Law, Medical).	—	35	—	—	—	—	—	—	35
Occupations not included in the above Classes.	4	34	—	—	4	8	22	9	107
Boys not left School or College.	29	13	—	—	2	—	—	—	44
Boys still in attendance at School or College.	80	415	—	—	45	9	7	11	567
No occupation stated.	—	—	—	—	—	—	8	13	21
Total Number of Young Men.	268	925	—	—	115	26	69	43	1,319
Young Women.									
Persons engaged in Farming Occupations.	21	2	—	17	6	—	—	—	46
Domestic Services.	6	1	—	—	—	—	—	—	7
Printing Trades.	—	—	—	—	—	—	—	—	—
Designers, Milliners, &c.	9	4	—	—	—	—	4	1	18
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—
Factory Workers not included in above.	—	27	—	—	—	—	13	—	40
Workers in Lace, Crochet, Embroidery, Spinning, Draw Thread Work, &c.	1	—	50	—	—	—	—	—	51
Salad-makers, Shopkeepers, &c.	25	45	—	—	—	—	4	—	74
Clerks, Cashiers, Civil Servants, &c.	—	9	—	—	—	—	—	—	9
Teachers, Assistant Teachers, Pupils Teachers.	1	61	—	—	1	—	12	6	81
Students (University, Medical).	—	28	—	—	—	—	—	—	28
Occupations not included in above Classes.	14	20	—	60	—	—	15	1	100
Girls not left School or College.	25	16	—	—	—	—	—	—	41
Girls still in attendance at School or College.	4	110	—	—	93	15	12	13	174
No occupation stated.	7	63	—	—	62	66	68	2	208
Total Number of Young Women.	111	381	50	74	92	98	128	23	957
Total Number of Students.	379	1,376	50	74	207	124	197	91	2,476





TABLE V.—continued,  
COUNTY SCHEMES—PERMANENT CENTRES OF INSTRUCTION—continued.  
CONNAUGHT.

	Galway.	Leitrim.	Mayo.	Monaghan.	Sligo.	Totals for Connaught.
Number of individual students enrolled, .	227	19	224	72	119	621
Number enrolled in—						
Preparatory Course Classes, .	27	—	—	—	—	27
Commercial Classes (including Languages Classes), .	40	—	—	—	—	40
Science (Pure and Applied) and Mathematical Classes, .	—	—	—	—	—	—
Handicraft Classes, .	27	—	—	—	—	27
Domestic Science Classes, .	149	—	120	—	—	269
Art Classes, .	11	—	—	—	—	11
Classes in Lace and Crochet Making, Embroidery, Spinning, Drapery Thread Work, &c.	55	19	224	72	19	411
Other Classes, .	—	—	—	—	—	—
OCCUPATIONS OF STUDENTS.						
Young Men.						
Persons engaged in Farming Occupations, .	11	—	—	—	—	11
Building Trades, including Workers in Wood, &c.	18	—	—	—	—	18
Couch and Car Builders, .	—	—	—	—	—	—
Engineers, Workers in Metal, Dringhtmen, &c.	—	—	—	—	—	—
Artists, Surveyors, Civil Engineers, &c.	—	—	—	—	—	—
Engineers, Electricians, Scientific Instrument Makers, &c.	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Famblers, Decorators, &c., .	—	—	—	—	—	—
Plumbers, Gasfitters, &c., .	1	—	—	—	—	1
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	—	—
Chemists, Analysts, Druggists, &c., .	5	—	—	—	—	5
Salesmen, Shopkeepers, Warehousemen, &c.	—	—	—	—	—	—
Clerks in Commercial Offices, .	4	—	—	—	—	4
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	—	—	—	—	—
Teachers, Assistant Teachers, Ford Teachers.	—	—	—	—	—	—
Students (University, Law, Medical), Occupations not included in the above Classes, .	1	—	—	—	—	1
Boys just left School or College, .	—	—	—	—	—	—
Boys still in attendance at School or College, No occupation stated, .	6	—	—	—	—	6
Total Number of Young Men, .	45	—	—	—	—	45
Young Women.						
Persons engaged in Farming Occupations, .	34	19	—	—	—	53
Domestic Servants, .	14	—	—	—	—	14
Printing Trades, .	—	—	—	—	—	—
Dressmakers, Milliners, &c., .	5	—	—	—	—	5
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—
Factory Workers not included in above, .	—	—	221	—	19	240
Workers in Lace, Crochet, Embroidery, Spinning, Drapery Thread Work, &c.	—	—	—	—	—	—
Saleswomen, Shopkeepers, &c., .	—	—	—	—	—	—
Clerks, Cashiers, Civil Servants, &c., .	—	—	—	—	—	—
Teachers, Assistant Teachers, Ford Teachers, Students (University, Medical), .	5	—	1	—	—	6
Occupations not included in above Classes, .	22	—	—	—	—	22
Girls just left School or College, .	40	—	—	—	—	40
Girls still in attendance at School or College, No occupation stated, .	123	—	2	72	—	206
Total Number of Young Women, .	241	19	224	72	19	575
Total Number of Students, .	287	19	224	72	19	621

TABLE V.—continued.

## COUNTY SCHEMES—ITINERANT INSTRUCTION.

## LEINSTER.

OCCUPATIONS OF STUDENTS.	Carlow.	Down.	Kildare.	Kilkenny.	King's Co.	Longford.	Louth.	Monaghan.	Queen's Co.	Westmeath.	Wexford.	Wick.	Totals for Leinster.
<i>Young Men</i>													
Persons engaged in Farming Occupations, including Fodder, including Workers in Wood, &c.	45	—	30	50	79	38	27	30	25	56	58	26	516
Cook and Car Builders.	—	—	—	—	3	1	—	2	—	—	—	—	6
Knives, Workers in Metal, Draughtsmen, &c.	5	—	2	2	—	—	1	1	—	—	—	—	14
Architects, Surveyors, Civil Engineers, &c.	—	—	—	—	1	1	—	—	—	—	—	—	2
Electrical Engineers, Scientific Instrument Makers, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Printing Trades—Compositors, Lithographers, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Painters, Decorators, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Plumbers, Gasfitters, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	—	—	—	—	6	—	—	—	—	—	—	—	6
Chemists, Analysts, Druggists, &c.	—	—	—	1	—	—	—	—	—	—	—	—	1
Salesmen, Shopkeepers, Warehousemen, &c.	—	—	5	—	10	8	3	6	12	1	3	—	50
Clerks in Commercial Offices.	6	—	1	1	21	1	—	—	—	—	—	—	30
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	—	—	1	1	—	2	—	1	2	—	—	—	6
Teachers, Assistant Teachers, Paid Teachers.	3	—	—	—	13	6	2	2	2	3	2	4	37
Students (University, Law, Medical).	—	—	—	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	—	—	—	5	6	1	1	15	17	—	20	18	86
Boys just left School or College.	20	—	—	4	—	—	—	—	—	—	—	—	24
Boys still in attendance at School or College.	27	—	20	61	76	61	24	79	26	41	35	18	466
No occupation stated.	—	—	—	2	—	—	—	—	—	—	—	—	7
Total Number of Young Men.	92	—	82	166	233	136	67	166	65	106	123	54	1,325
<i>Young Women</i>													
Persons engaged in Farming Occupations, Domestic Services.	257	226	65	203	49	76	13	127	54	81	231	44	1,417
Printing Trades.	133	17	75	64	16	3	3	20	3	12	27	3	326
Ironworkers, Milliners, &c.	—	—	4	8	—	—	6	4	1	—	7	3	61
Textile Industries—Designers, Weavers, &c.	—	—	—	—	—	—	—	—	—	—	—	—	—
Factory Workers not included in above.	86	—	—	—	—	—	—	—	—	—	—	—	86
Workers in Lace, Crochet, Embroidery, Sewing, Brass Thread Work, &c.	—	84	—	—	—	—	37	—	—	—	—	—	71
Saleswomen, Shopkeepers, &c.	—	37	11	18	5	—	5	23	3	8	3	—	116
Clerks, Costlers, Civil Servants, &c.	14	—	5	1	3	—	—	5	1	—	—	1	29
Teachers, Assistant Teachers, Paid Teachers.	13	14	10	8	3	5	2	11	8	11	11	2	104
Students (University, Medical).	—	—	—	—	—	—	—	—	—	—	—	—	—
Occupations not included in above Classes.	31	93	8	—	—	—	17	26	4	65	27	4	263
Girls just left School or College.	—	—	7	1	—	—	—	—	—	—	—	—	8
Girls still in attendance at School or College.	89	—	13	60	29	72	15	94	14	27	10	15	330
No occupation stated.	—	29	2	40	30	—	—	15	3	—	—	—	102
Total Number of Young Women.	593	450	197	392	111	136	59	325	97	194	220	73	2,968
Total Number of Students.	676	450	279	559	344	272	126	491	162	294	443	127	4,293

TABLE V.—continued.

## COUNTY SCHEMES—ITINERANT INSTRUCTION.—continued.

## MUNSTER.

OCCUPATIONS OF STUDENTS.	Cher.	Cork.	Kerry.	Waterford.	Tipperary (S.E.)	Tipperary (S.W.)	Tipperary (Gt. Urban and Ennis).	Waterford.	Totals for Munster.
<b>Young Men.</b>									
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	46	152	35	-	46	-	13	114	694
Cook and Car Builders, Engineers, Workers in Metal, Druggists, &c.	-	4	-	-	-	-	-	5	-
Architects, Surveyors, Civil Engineers, &c.	-	-	-	-	-	-	-	-	-
Electrical Engineers, Scientific Instrument Makers, &c.	-	-	-	-	-	-	-	-	-
Printing Trades—Compositors, Lithographers, &c.	-	-	-	-	-	-	-	1	1
Textile Industries—Designers, Weavers, &c.	-	-	-	-	-	-	-	-	-
Painters, Decorators, &c.	-	-	1	-	-	-	-	2	3
Barbers, Grafters, &c.	-	-	-	-	-	-	-	-	-
Trades involving Applied Art—Jewellers, Furniture Makers, &c.	-	-	2	-	-	-	-	2	4
Chemists, Analysts, Grangers, &c.	-	-	-	-	-	-	-	1	1
Salesmen, Shopkeepers, Watchmen, &c.	9	14	11	-	1	1	-	5	40
Clerks in Commercial Offices.	-	20	1	-	-	-	-	-	16
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	-	3	1	-	1	9	-	-	2
Teachers, Assistant Teachers, Pupil Teachers.	2	25	14	-	2	1	-	36	60
Students (University, Law, Medical).	-	4	-	-	-	-	-	-	1
Occupations not included in above Classes.	9	45	15	-	3	2	1	29	107
Boys just left School or College.	-	8	-	-	3	-	-	3	14
Boys still in attendance at School or College.	22	177	124	-	20	15	12	139	500
No occupation stated.	9	-	26	-	-	-	2	-	37
<b>Total Number of Young Men.</b>	<b>98</b>	<b>447</b>	<b>282</b>	<b>-</b>	<b>79</b>	<b>24</b>	<b>28</b>	<b>339</b>	<b>1,292</b>
<b>Young Women.</b>									
Persons engaged in Farming Occupations, Domestic Servants.	48	273	507	436	168	258	42	115	2,017
Printing Trades.	12	18	43	89	17	15	1	20	207
Druggists, Milliners, &c.	2	15	13	6	3	4	-	2	50
Textile Industries—Designers, Weavers, &c.	-	-	-	-	-	-	-	-	-
Factory Workers not included in above.	-	12	-	1	-	-	-	-	13
Workers in Lace, Crochet, Embroidery, Spinnings, Quilt Thread Work, &c.	-	177	-	-	-	-	-	-	177
Saleswomen, Shopkeepers, &c.	20	90	64	67	42	1	1	6	321
Clerks, Cashiers, Civil Servants, &c.	5	5	6	2	-	2	-	-	14
Teachers, Assistant Teachers, Pupil Teachers.	10	20	20	24	11	18	1	5	144
Students (University, Medical).	-	-	-	-	4	-	-	-	4
Occupations not included in above Classes.	06	45	36	14	-	31	3	5	220
Girls just left School or College.	-	-	5	37	-	6	-	52	94
Girls still in attendance at School or College.	10	28	120	217	57	100	22	132	759
No occupation stated.	22	96	165	61	18	21	-	3	698
<b>Total Number of Young Women.</b>	<b>256</b>	<b>918</b>	<b>1,032</b>	<b>623</b>	<b>287</b>	<b>338</b>	<b>70</b>	<b>260</b>	<b>4,424</b>
<b>Total Number of Students.</b>	<b>410</b>	<b>1,365</b>	<b>1,304</b>	<b>923</b>	<b>565</b>	<b>562</b>	<b>98</b>	<b>699</b>	<b>6,726</b>



TABLE V.—continued.

## COUNTY SCHEMES—ITINERANT INSTRUCTION.—continued.

## CONNAUGHT.

OCCUPATIONS OF STUDENTS.	Galway.	Londonderry.	Mayo.	Donegal.	Sligo.	Totals for Connaught.
<b>Young Men.</b>						
Persons engaged in Farming Occupations, Building Trades, including Workers in Wood, &c.	61	75	175	117	82	510
Coch and Car Builders.	-	-	-	-	-	-
Engineers, Workers in Metal, Draughtsmen, &c.	-	-	-	-	-	-
Architects, Surveyors, Civil Engineers, &c.	-	-	-	-	-	-
Electrical Engineers, Scientific Instrument Makers, &c.	-	-	-	-	-	-
Printing Trades—Compositors, Lithographers, &c.	-	-	-	-	-	-
Textile Industries—Designers, Weavers, &c.	-	-	-	-	-	-
Painters, Decorators, &c.	-	-	1	-	-	1
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	-	-	-	-	-	-
Chemists, Analysts, Draftsmen, &c.	-	-	-	-	-	-
Schoolmasters, Shopkeepers, Warehousemen, &c.	-	-	2	-	-	2
Clerks in Commercial Offices.	-	-	-	-	-	-
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	-	-	-	-	-	-
Teachers, Assistant Teachers, Pupil Teachers.	-	-	5	-	-	5
Students (University, Law, Medical).	-	-	-	10	-	10
Occupations not included in above Classes.	3	-	-	4	-	7
Boys just left School or College.	-	-	63	-	-	63
Boys still in attendance at school or College.	7	19	9	-	-	35
No occupation stated.	-	-	-	-	-	-
<b>Total Number of Young Men.</b>	<b>75</b>	<b>94</b>	<b>253</b>	<b>171</b>	<b>82</b>	<b>675</b>
<b>Young Women.</b>						
Persons engaged in Farming Occupations, Domestic Services, &c.	947	110	281	89	161	1,588
Building Trades.	8	-	2	3	2	15
Dressmakers, Milliners, &c.	19	-	-	-	-	19
Textile Industries—Designers, Weavers, &c.	3	-	-	1	-	4
Factory Workers not included in above.	-	-	-	-	-	-
Workers in Lace, Crochet, Embroidery, &c.	-	-	-	-	40	40
Springing, Dressing Thread Work, &c.	-	-	-	-	-	-
Saleswomen, Shopkeepers, &c.	89	-	-	4	-	93
Clerks, Cashiers, Civil Servants, &c.	8	-	-	-	-	8
Teachers, Assistant Teachers, Pupil Teachers.	67	-	4	15	3	79
Students (University, Medical).	-	-	-	-	-	-
Occupations not included in above Classes.	23	14	-	-	-	37
Girls just left School or College.	59	20	-	-	-	79
Girls still in attendance at School or College.	72	-	52	15	5	144
No occupation stated.	55	-	-	153	-	208
<b>Total Number of Young Women.</b>	<b>1,366</b>	<b>144</b>	<b>338</b>	<b>290</b>	<b>211</b>	<b>2,349</b>
<b>Total Number of Students.</b>	<b>1,374</b>	<b>238</b>	<b>591</b>	<b>461</b>	<b>293</b>	<b>2,957</b>

TABLE V.—continued.

## SUMMARY.

OCCUPATIONS OF STUDENTS.	URBAN SCHOLARS.				
	Lemmer.	Munster.	Ulster.	Connaught.	Total.
<b>Young Men.</b>					
Persons engaged in Farming Occupations, including Trades, including Workers in C Wood, &c.	27	3	42	2	64
Coach and Car Builders.	137	159	281	34	611
Engineers, Workers in Metal, Draughtsmen, &c.	20	9	16	4	59
Architects, Surveyors, Civil Engineers, &c.	339	167	803	6	1,315
Electrical Engineers, Scientific Instrument Makers, &c.	24	30	20	-	113
Printers, Trades—Compositors, Lithographers, &c.	68	94	169	1	332
Trades Involving Designing, Weavers, &c.	99	44	77	13	233
Painters, Decorators, &c.	25	11	465	15	512
Plumbers, Gasfitters, &c.	33	60	61	9	163
Trades Involving Applied Art—Jewellers, Furniture Makers, &c.	41	51	57	1	150
Chemists, Analysts, Druggists, &c.	34	30	50	3	117
Salesmen, Shopkeepers, Workmen, &c.	76	50	114	1	241
Clerks in Commercial Offices.	146	200	392	47	815
Clerks in Banks, Civil Service, Law, Assurance, and Accountants' Offices.	371	232	717	29	1,369
Teachers, Assistant Teachers, Pupil Teachers.	290	42	281	-	613
Students (University, Law, Medical).	72	82	240	16	410
Occupations not included in the above Classes.	77	15	63	7	162
Boys just left School or College.	470	131	249	25	875
Boys still in attendance at School or College.	72	51	23	-	146
No occupation stated.	191	130	232	61	604
	161	130	238	6	495
<b>Totals (Young Men).</b>	<b>2,743</b>	<b>1,327</b>	<b>4,714</b>	<b>276</b>	<b>9,058</b>
<b>Young Women.</b>					
Persons engaged in Farming Occupations, Domestic Servants, Farming Trades.	6	5	24	-	35
Dressmakers, Milliners, &c.	226	43	345	21	635
Trades Involving Designing, Weavers, &c.	8	15	8	3	34
Factory Workers not included in above.	95	-	310	20	425
Workers in Lace, Crochet, Embroidery, &c.	27	41	328	16	412
Springers, Dress Thread Work, &c.	45	5	467	15	529
Saleswomen, Shopkeepers, &c.	2	200	29	2	233
Clerks, Cashiers, Civil Servants, &c.	151	154	215	21	541
Teachers, Assistant Teachers, Pupil Teachers.	220	73	459	27	780
Students (University, Medical).	263	175	664	52	1,154
Occupations not included in above Classes.	27	6	64	4	101
Girls just left School or College.	49	67	233	53	412
Girls still in attendance at School or College.	130	67	80	-	277
No occupation stated.	199	137	413	22	769
	879	615	1,612	27	3,143
<b>Totals (Young Women).</b>	<b>2,331</b>	<b>1,721</b>	<b>5,138</b>	<b>328</b>	<b>9,508</b>
<b>Totals (Young Men and Young Women).</b>	<b>5,072</b>	<b>3,048</b>	<b>10,352</b>	<b>614</b>	<b>19,106</b>

TABLE V.—continued.

## SUMMARY.

COUNTY SCHOOLS. Permanent copies of Instruction.					COUNTY SCHOOLS. Itinerant Instruction.					CONTRIBUTORS OF SCHOLARS
Leicester.	Monster.	Uddest.	Connaught.	Totals.	Leicester.	Monster.	Uddest.	Connaught.	Totals.	
Young Men										
45 68 11 69 6 2 3 21 9 13 32 6 68 97 51 39 16 47 30 139 21	131 161 30 32 3 — 3 15 3 4 12 84 25 75 25 101 43 568 21	74 49 2 18 12 — 4 5 6 — 4 — — 24 25 — — — 32 102 15	18 53 — — — — — — 1 — — — — — — — — — — 6 —	263 287 16 153 10 7 10 26 28 25 35 22 5 279 100 137 51 231 96 874 57	516 56 14 — 2 — — — — — — — — — — — — — — — 468 7	404 95 6 4 — — 1 — — — — — — — — — — — — 500 37	551 58 1 — — — — 39 1 — — — — — — — — — — — 615 7	519 2 — — — — — — 1 — — — — 2 — — — — — — 62 9 80	1,981 269 27 — 2 — 1 — 12 10 12 — 4 138 59 50 — 61 247 54 1,670 80	Persons engaged in Farming Occupations. Building Trades, including Workmen in Wood, &c. Coach and Car Builders. Engineers, Workmen in Metal, Draughts- men, &c. Architects, Surveyors, Civil Engineers, &c. Electrical Engineers, Scientific Instrumental Makers, &c. Printing Trades—Compositors, Litho- graphers, &c. Textile Industries—Dressmen, Weavers, &c. Painters, Decorators, &c. Furniture, Upholsters, &c. Trades involving Applied Art—Jewellers, Furniture Makers, &c. Chemists, Analysts, Druggists, &c. Bakers, Shopkeepers, Warehousemen, &c. Clerks in Commercial Offices. Clerks in Banks, Civil Service, Law, Ac- cademy, and Accountants' Offices. Teachers, Assistant Teachers, Pupil Teachers. Students (University, Law, Medical). Occupations not included in above Classes. Boys not left School or College. Boys still in attendance at School or College. No occupation stated.
870	1,329	578	46	3,013	1,325	1,292	1,223	473	4,313	Totals (Young Men).
Young Women.										
87 82 — 52 23 6 236 64 18 107 — 88 19 171 136	46 8 — 18 — 40 51 74 9 81 21 194 39 174 288	126 38 5 26 — 13 799 39 37 — 241 26 143 14	53 14 — 8 — — 240 — — 6 — — 22 32 290	292 142 5 186 23 61 1,286 270 44 161 23 415 104 308 796	1,417 336 — 61 — 38 71 116 29 161 — 265 14 349 302	2,017 307 — 99 — 83 177 81 14 144 — 209 39 758 435	934 251 31 30 14 44 96 49 12 — 254 38 277 268	1,588 11 — 20 3 44 43 49 4 79 — 37 38 197 154	5,936 739 162 162 17 164 378 266 63 496 — 796 136 1,661 934	Persons engaged in Farming Occupations. Domestic Servants. Printing Trades. Dressmakers, Milliners, &c. Textile Industries—Designers, Weavers, &c. Factory Workers not included in above. Workers in Lace, Crochet, Embroidery, Knitting, Draw Thread Work, &c. Seamstresses, Shopkeepers, &c. Clerks, Cashiers, Civil Servants, &c. Teachers, Assistant Teachers, Pupil Teachers. Students (University, Medical). Occupations not included in above Classes. Girls not left School or College. Girls still in attendance at School or College. No occupation stated.
1,114	967	1,338	572	4,164	2,965	4,434	2,741	2,285	12,025	Totals (Young Women).
1,981	2,476	2,096	623	7,176	4,285	5,730	3,564	2,568	16,138	Totals (Young Men and Young Women).

TABLE VI.

## LOCAL SCIENCE AND ART EXAMINATIONS (IRELAND), 1910.

LIST OF EXAMINATION CENTRES, showing the subjects in which examinations were held at each Centre.

(NOTE.—A.D.—Architectural Design; A.M.—Drawing the Antique from Memory; Anat.—Anatomy; Arch.—Architecture; C.O.—Drawing of Common Objects from Memory; D.—Design; D.A.—Drawing the Antique; D.L.—Drawing from Life; F.—Freehand Drawing in Outline; G.D.—Geometrical Drawing (Art); H.O.—Historic Ornament; L.—Drawing in Light and Shade from a Cast; M.—Model Drawing; M.A.—Modelling from the Antique; M.D.—Modelling Design; M.H.—Modelling the Head from Life; M.L.—Modelling from Life; P.—Perspective; P.F.—Memory Drawing of Plant Forms; Princ. O.—Principles of Ornament; Pig. O.—Painting Ornament; S.L.—Painting from Still Life; Science Subjects are designated by the numbers given them in "Syllabuses and Lists of Apparatus" of the Board of Education for 1900-10.)

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
	<b>LIMERICK.</b>		
6247	CO. CARLOW : Bagenstown : Presentation Convent.	Subjects XIV. and XXV.	F., G.-D., and M.
6269	Carlow : Convent of Mercy.	—	D., F., G.-D., L., and M.
6156	Tullow : Brightline Convent.	—	D., L., and M.
6407	Tullow : St. Patrick's Seminary.	—	D., F., G.-D., L., and M.
6248	CO. DUBLIN : Blackrock : Municipal Technical School.	Subject XXV.	—
6262	Chapelizod : Mount Sockville Convent.	Subjects XIV. and XXV.	L.
6263	Kingsdown : Municipal Technical School.	Subject III.	F., G.-D., and M.
6061	Ringsend : Pembroke Technical School.	Subjects II., Vp., VIIa., VII., and XXVI.	—
6163	CO. DUBLIN OF DUBLIN : Dublin Christian Brothers' Novitiate, Marrow, Clontarf.	—	D., F., G.-D., L., and M.
6019	Dublin : City of Dublin Technical Schools.	Subjects I., II., III., V. (Div. I.), V. (Div. II.), Vp., VIIa., VIIb., VIIc., IX., X., Xp. (Stage I), Xp. (Stage 2 & 3), XI., XII., XIII., XIV., XVII., XXII., XXIII., and XXV.	D., F., G.-D., L., and M.
6019	Dublin : Metropolitan School of Art.	Subject I.	A.H., Anat., Arch., G.O., D., D.A., D.L., F., G.-D., H.O., L., M., M.A., M.D. (Stage I), M.D. (House), M.H., M.L., P., P-F., Princ. D., Pir. O., S.L.
6035	Dublin : Royal College of Science.	Subjects I., II., V. (Div. I.), V. (Div. II.), Vp., VIIa., VIIb., VIIc., VIIIa., VIIIb., VIIIc., IX., X., Xp. (Stage I), XIV., XXIV., and XXVI.	—
6037	CO. KILKENNY : Kilkenny : City Technical School.	Subjects III., V. (Div. I.), Vp., and VIIa.	C.-O., D., F., G.-D., L., M., and P.-F.
6268	Kilkenny : Loreto Convent.	—	L.



## EXAMINATION CENTRES—continued.

Centre Number	Name of Centre	Subjects in which Examinations were held.	
		Science.	Art.
<b>KIRKE'S COUNTY</b>			
6661	Barnstaple: La Sainte Union Convent.	—	F, G-D, E and H.
6669	Burr: Technical School, . . .	—	F.
<b>Co. LOUTH</b>			
6445	Drogheda: Municipal Technical School.	Subjects I., III., V. (Div. I), Vp., VII., IX., X., Xp. (Stage I), and XX.	D, F, L. and M.
6130	Drogheda: Rosna Convent.	—	F.
6415	Dundalk: Municipal Technical School.	Subjects I., II., III., V. (Dev. I), V. (Dev. II), Vp., VIa, VIb, VII, VIIa, VIIb, VIIIa, VIIIb, VIIIc, IX., X., Xp. (Stage I), XIX, and XXII.	D, F, G-D, L. and M.
<b>Co. MARCH</b>			
6566	Navan: Loreto Abbey, . . .	—	G-D, and L.
<b>QUEEN'S COUNTY</b>			
6326	Abbeyleix: Brigidine Convent, .	Subjects XIV. and XXV.	L.
6970	Mountmellick: The Friends' School	—	F.
6339	Mountmellick: Brigidine Convent.	—	F.
6106	Mountmellick: Monastery School, .	—	F., G-D, L., and M.
<b>Co. WESTMEATH</b>			
6211	Athlone: La Sainte Union Convent	—	F, G-D, L. and M.
6215	Athlone: St. Mary's School . . .	Subjects VIa, IX., and X.	D, F, G-D, L. and M.
6226	Mullingar: Loreto Convent, . . .	—	L.
<b>Co. WICK</b>			
6249	Ennascorthy: Loreto Convent, . .	—	G-D.
6620	Ennascorthy: Technical School, . .	Subject III.	—
6085	Gorey: Loreto Abbey, . . .	—	G-D.
6759	New Ross: Technical School, . . .	—	F.
6738	Newtownbury: St. Mary's Convent.	Subjects XIV and XXV	—
6347	Wexford: Municipal Technical School.	Subjects II. and Vp.	D, F, G-D, L., M., P, P.F. and S-L.
<b>Co. WICKLOW</b>			
6667	Arklow: Technical School, . . .	Subjects II., III., and Vp	F.
6457	Birr: Technical School, . . .	Subject III.	—
6702	Wicklow: Technical School, . . .	—	G-D.
<b>MUNSTER</b>			
<b>Co. CLARE</b>			
6663	Ennis: St. Mary's School, Convent of Mercy.	—	F. and L.
<b>Co. CORK</b>			
6633	Barndon: Technical School, . . .	Subjects III., X., and Xp. (Stage I).	D, F, L., and M.
6012	Blackrock: Ursuline Convent, . .	—	D, and G-D.
6967	Coomshingaun: Technical School, .	Subject X.	D, F, G-D, and L.
6004	Dunmore: St. Mary's School, Convent of Charity.	—	D, F, G-D, L. and M.
6761	Ferney: Technical School, . . .	Subjects I., III. and V. (Div. I)	A-D, D, F, G-D, L. and M.
6415	Kinsale: Technical School, . . .	Subjects X. and Xp. (Stage I).	—

## EXAMINATION CENTRES—continued.

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science.	Art.
Co. COCK—con.			
6459	Microton Technical School.	Subjects X and Xp (Stage 1).	F, G-D, and H.
6884	Midlaw Technical School.	—	F.
6760	Midleton Technical School.	Subject III.	F, G-D, and L.
6004	Queensdown Technical School.	Subjects I, II, III, IV, Vp, VII, VIIA, IX, and XXII.	F, G-D, and M.
6759	Ringskiddy Technical School.	Subjects II, VII, VIIA and XXII.	—
6682	Slibbenon Technical School.	—	F.
6434	Youngtal Presentation Convent.	—	D, F, and M.
6639	Youngtal Technical School.	—	F, G-D, and L.
Co. DUBLIN OF COCK			
6013	Cork Christian Brothers' Schools, Our Lady's Mount.	—	D, F, G-D, L, and M.
6000	Cork Crawford Municipal Technical Institute.	Subjects I, II, III, IV, V (Div. I), V (Div. II), Vp, VIIA, VII, VII, VIIA, VIII, IX, X, XXII, and XXV.	A-M, Anat., Arch., D, D-A, D-b, F, G-D, L, M, M-A, M-D (Stage 2), M-d, P, P-F, Stage O, Fig O, and S-L.
6453	Cork Presentation Brothers' Training College.	Subject V (Div. I).	D, F, and G-D.
6057	Cork St. Alloys' School, St. Mary's of the Isle.	—	M.
6024	Cork St. Vincent's Convent School.	Subject V (Div. I).	D, F, G-D, L, and M.
Co. KERRY			
6680	Kilbarney Technical School.	Subject I.	F, G-D, and M.
6678	Lisnoul Technical School.	Subject III.	F and M.
6571	Trillick Central Technical School.	Subjects I, II, III, and Vp.	D-G, F, G-D, and M.
Co. ROGUE OF LINCOLN			
6360	Lincoln Christian Brothers' Schools, Seaton Street.	—	D, F, G-D, L, and M.
6039	Lincoln Municipal Science, Art and Technical School.	Subjects I, II, III, V (Div. I), Vp, VIIA, VII, VIIA, VII, VIIA, VII, VII, IX, X, Xp (Stage 1), Xp (Stage 2), XI and Xp.	A-M, D, D-A, F, G-D, L, M, M-A, P, P-F, Fig O, and S-L.
Co. THURBURY			
6347	Gadshel Presentation Convent.	Subject V (Div. I).	D, F, L, and S-L.
6594	Gloucester Central Technical School.	Subjects I, II, III, Vp, VIIA, VII, VIIA, VII, VIIA, VII, VII, and XXII.	D, F, G-D, L, M, and P.
6390	Houma Technical School.	Subjects V (Div. I), and X.	—
6069	Sturges Ursuline Convent.	Subjects V (Div. I), XIV and XXV.	D, and F.
Co. WATERFORD			
6806	Daargrove Technical School.	Subject III.	D, F, and G-D.
6806	Lismore Technical School.	—	F.
6816	Tramore Technical School.	Subjects I and III.	F.

## EXAMINATION CENTRES—continued.

Centre Number	Name of Centre.	Subjects in which Examinations were held.	
		Science	Art.
6417	CO. DOMINION OF WATERFORD Waterford: Central Technical Institute.	Subjects I., II., III., V. (Div. I.), V. (Div. II.), Vp., VIIa., VIIb., VIIc., VIII., VIIIa., IX., X., Xp. (Stage I), Xp. (Stage II), XI., XII., XVII., XXV., and XXVI.	Anat., Arch., D., F., G.-D., L., M., P., P.-F., Phys. O. and S.I.
6118	Waterford: Christian Brothers' School, Mount St.	—	D., F., G.-D., L., and M.
6100	Waterford: St. Anne's High School, Ursuline Convent.	—	L.
ULSTER.			
6459	CO. ANTRIM: Ballymena: Municipal Technical School.	Subjects I., II., III., V. (Div. I.), V. (Div. II.), Vp., IX., X., Xp. (Stage II), and XXII.	D., F., G.-D., L., M., and S.-L.
6350	Ballymena: Technical School.	Subjects I., III., Vp., Xp. (Stage II), and XXVI.	F., G.-D., L., and M.
6845	Carrickfergus: Technical School.	Subjects II., III., and Vp.	F.
6328	Larne: Technical School.	Subjects II., III., V. (Div. I.), IX., and Xp. (Stage I).	D., F., G.-D., and M.
6116	Larne: Ulster Provincial School.	Subjects V. (Div. I.), X., and Xp. (Stage I).	F., and M.
6683	CO. DOWN: OF DUBLIN: Belmont: Christian Brothers' Trade Preparatory School.	Subject Vp.	—
6227	Belmont: Municipal Technical Institute.	Subjects I., II., III., IV., V. (Div. I.), V. (Div. II.), Vp., VIIa., VIIb., VIIc., VIII., VIIIa., VIIIb., VIIIc., IX., X., Xp. (Stage I), Xp. (Stage II & III), XI., XII., XIII., XIV., XVI., XVII., XXII., XXIII., and XXV.	A-M., Anat., Arch., C.-D., D., D.-A., D.-E., F., G.-D., H.-G., L., M., M.-A., M.-D. (Stage II), M.-H., M.-L., P., P.-F., Phys. O., and S.-L.
6071	Belmont: Victoria College.	—	F.
6367	CO. ARMAGH: Armagh: Municipal Technical School.	Subjects I., III., and Vp.	M.
6038	Armagh: Natural History and Philosophical Society's Art Rooms.	—	D., F., G.-D., L., and M.
6432	Lurgan: Convent of Our Lady of Mercy.	—	F., G.-D., L., and M.
6367	Lurgan: Municipal Technical School.	Subjects I., Vp., VIIb., VIIc., VIIIc., IX., and X.	D., F., G.-D., L., M., and P.-F.
6274	Petersdown: Municipal Technical School.	Subjects II., Vp., VII., and VIIa.	D., F., G.-D., and M.

## EXAMINATION CENTRES—continued.

Centre Number	Name of Centre	Subjects in which Examinations were held.	
		Science	Art.
6362	Co. DOWN: Banbridge Technical School, .	Subjects X. and Xp (Stage 1).	F. and G-D.
6367	Belfast Technical School, .	Subject V (Div. 1).	F., G-D, L, M, and P-F
6672	Holywood Municipal Technical School, .	Subjects X. and Xp. (Stage 2).	F, G-D, and M.
6644	Newry Municipal Technical School, .	Subjects I, II, III, Va., IX, X, Xp. (Stage 2), XVII, and XXIII.	C-O, D, F, G-D, L, M, P, P-F, and S-L
6645	Newtownards Municipal Techni- cal School, .	Subjects I and III.	F, L, and M
6672	Co. FERMANAGH: Banohill Technical School, .	Subjects I, III, Vp., and IX.	C-O, F, and G-D.
6235	Co. LONGFORD: Colraige Technical School, .	Subjects I, III, Vp., VIIIa, VIIIc, X, and Xp. (Stage 1).	D, F, G-D, L, M, and S-L.
6676	Terenure Technical School, .	—	F.
6663	Maghera Technical School, .	Subjects I and III.	F, and M.
6649	Co. ROSKOPH or LONGFORD: Longferry Convent of Our Lady of Mercy.	—	D, F, G-D, and M.
6657	Longferry Municipal Techni- cal School, .	Subjects I, II, III, V (Div. 1), V (Div. II), Vp, VIIa, VIIc, VIII, VIIIa, VIIIc, VIIIc, IX, X, Xp (Stage 1), XI, and XXII.	C-O, D, F, G-D, L, M, P, P-F, and P-F-D
6110	Longferry Strand Home School, .	Subject XIV.	—
6223	Co. MONAGHAN: Carrickmacross Convent of St. Louis.	—	F, G-D, and M.
6291	Co. TYRONE: Cookstown Technical School, .	—	D, F, G-D, and M.
6281	Bangor Technical School, .	Subjects III, IX, X, and Xp. (Stage 2)	D, F, M, and P-F.
6707	Omagh Technical School, .	Subjects III, IX, X, and Xp. (Stage 1)	F, and M.
6708	Strabane Technical School, .	Subject III.	F, and M.
CONNAUGHT.			
6694	Co. GALWAY: Ballyhaunis Technical School, .	Subjects I, V (Div. I), and Vp.	D, F, L, M, and P-F
6005	Galway City of Galway Techni- cal Institute	Subjects III, V, (Div. I), VII, VIII, IX, and XXVI.	F, L, and M
6267	Galway Dominican Convent, Taylor's Hill.	Subjects XIV and XXV.	—
6903	Co. MAYO: Kiltinagh St. Leo's Convent, .	Subject X.	—
6278	Wexford - Christian Brothers' Schools	—	L.
6245	Co. SLIGO: St. Mary's Brothers' Institute, .	Subject V. (Div. I).	F
6765	Sligo Municipal Technical School	Subjects I, III, V (Div. I), and Vp.	F, G-D, L, and M.

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TABLE VII.

LOCAL SCIENCE AND ART EXAMINATIONS (IRELAND),  
1910.

## Summaries of Results.

Year.	Number Examined.	Number of Passes.	Number of Failures.	Percentage of Passes.
1910, . . . . .	5,986	3,638	2,348	61.00
1909, . . . . .	6,123	3,535	2,607	57.65
1908, . . . . .	5,810	3,587	2,323	60.60
1907, . . . . .	6,340	3,641	2,699	57.44
1906, . . . . .	6,108	3,473	2,635	56.66

(The corresponding figures for the Examinations of 1909 are given in light type.)

		Number Examined.	Number of Passes.	Number of Failures.	Percentage of Passes.
Science Examinations,	{ Day,	No.	Examinations held	Examinations held	
		No.	Examinations held	Examinations held	
	Evening,	2,606	1,679	1,917	63.88
		2,529	1,651	895	64.61
		2,606	1,679	1,917	63.88
		2,529	1,651	895	64.61
Art Examinations,	{ Day,	No.	Examinations held	Examinations held	
		No.	Examinations held	Examinations held	
	Evening,	255	167	88	65.49
		2,238	1,959	1,271	66.66
		2,238	1,794	1,024	54.61
		2,238	1,959	1,271	66.66
		2,643	1,901	1,712	59.05
For the purpose of comparison the figures of the whole of the Examinations held by the Board of Education, Whitehall, are appended.					
Science,	1910	Figures not yet available.			
	1909	68,346	45,117	23,229	66.00
	1908	65,228	44,011	21,217	67.41
	1907	69,198	44,966	24,232	67.85
	1906	73,733	50,214	23,519	68.14
Art,	1910	Figures not yet available.			
	1909	50,752	33,181	17,571	65.41
	1908	53,408	34,626	18,782	64.66
	1907	57,254	34,808	22,446	60.79
	1906	64,959	32,266	32,693	60.41
Totals,	1910	Figures not yet available.			
	1909	119,098	77,298	41,800	64.90
	1908	118,636	78,637	40,000	66.35
	1907	126,452	81,729	44,723	64.63
	1906	138,733	82,510	56,223	64.52

## SCIENCE EXAMINATIONS (IRELAND).

Subject.	Stage 1		Stage 2.		Stage 3.		Honours.		
	Number Examined.		Number Examined.		Number Examined.		Number Examined.		
	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.	
I. Practical Plane and Solid Geometry.	106	31	48	57	8	33	24	1	8
	94	23	29	58	14	24	12	15	10
II. Machine Construction and Drawing.	161	30	62	72	7	35	18	1	5
	157	30	61	65	11	35	15	7	1
III. Building Construction and Drawing.	133	24	36	50	7	38	11	7	28
	93	15	38	72	23	41	22	3	15
IV. Naval Architecture.	82	6	14	9	4	5	3	1	8
	15	6	2	8	2	5	4	1	3
Va. Practical Mathematics.	132	37	58	163	24	72	44	2	12
	207	90	73	144	13	90	54	4	13
Do. (Section 1 only)	110	108*	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
Vib. Theoretical Mechanics (Solids).	99	10	25	51	3	26	-	-	-
	42	9	29	15	-	8	-	-	-
Vib. Theoretical Mechanics (Fluids).	15	2	4	19	2	9	-	-	-
	13	0	4	4	2	4	-	-	-
VII. Applied Mechanics.	96	12	26	-	-	-	-	-	-
	119	22	23	62	4	24	13	7	-
VIIIa. Applied Mechanics (Machines and Structures).	-	-	-	32	29	28	29	1	10
	-	-	-	-	-	-	-	-	-
VIIIb. Applied Mechanics (Machines and Hydraulics).	-	-	-	29	3	6	15	2	4
	-	-	-	-	-	-	-	-	-
VIII. Sound, Light, and Heat.	42	10	27	-	-	-	-	-	-
	49	14	29	-	-	-	-	-	-
VIIIa. Sound.	-	-	-	8	-	5	-	-	1
	-	-	-	10	2	4	1	1	-
VIIIb. Light.	-	-	-	11	-	8	-	-	1
	-	-	-	17	1	8	1	1	-
VIIIc. Heat.	-	-	-	26	1	14	1	1	-
	-	-	-	29	-	13	3	-	-
IX. Magnetism and Electricity.	92	29	54	12	8	12	1	-	-
	93	35	35	15	2	2	1	-	-
X. Theoretical Inorganic Chemistry.	111	21	43	56	7	23	3	1	9
	119	45	45	35	1	10	4	2	-
XI. Theoretical Organic Chemistry.	2	1	2	3	2	-	1	-	-
	15	2	4	2	-	2	-	-	-

\* Passes; only one class of success.

## SCIENCE EXAMINATIONS (IRELAND)—continued.

SUBJECT.	Stage 1.		Stage 2.		Stage 3.		Honours.	
	Number Examined.		Number Examined.		Number Examined.		Number Examined.	
	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.
Xp. Practical Inorganic Chemistry	84	87	15	39	1	10	3	3
	69	19	35	33	4	10	9	2
Xlp. Practical Organic Chemistry.	7	9	4	-	-	1	1	-
	12	10	3	2	1	-	-	-
XII. Geology.	2	4	-	-	-	-	-	-
	3	2	1	1	-	-	-	-
XIII. Microscopy.	3	-	3	-	-	-	-	-
	1	-	1	2	3	-	-	-
XIV. Human Physiology.	44	7	11	17	7	-	-	-
	56	20	21	14	2	8	1	-
XVI. Zoology.	-	-	1	-	1	-	-	-
	-	-	-	-	-	-	-	-
XVII. Botany.	14	1	8	1	-	-	-	-
	17	5	6	3	3	-	-	-
XVIII. Principles of Mining.	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
XIX. Theoretical Metallurgy.	-	-	1	-	1	-	-	-
	-	-	-	-	-	-	-	-
XX. Navigation.	9	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
XXII. Heat Engines.	96	9	34	25	3	13	8	3
	35	6	18	20	3	16	3	6
XXIII. Photomicroscopy.	3	1	2	5	1	-	-	-
	5	3	7	4	2	-	-	-
Do. (Section 1 only)	12	7	-	-	-	-	-	-
	11	6	-	-	-	-	-	-
XXIV. Agricultural Science and Rural Economy (Section B).	-	-	-	-	-	-	-	-
	1	-	-	-	-	-	-	-
XXIV. Agricultural Science and Rural Economy (Section A)	-	-	4	4	-	-	-	-
	-	-	-	-	-	-	-	-
XXIV. Agricultural Science and Rural Economy (Section D)	-	-	2	1	1	-	-	-
	-	-	-	-	-	-	-	-
XXIV. Agricultural Science and Rural Economy (Section E)	-	-	1	1	-	-	1	-
	-	-	-	-	-	-	-	-
XXIV. Agricultural Science and Rural Economy (Section F)	-	-	1	1	-	-	-	-
	-	-	-	-	-	-	-	-

\* Passes, only one class of success.

## SCIENCE EXAMINATIONS (IRELAND)—continued.

Subject.	Stage 1.		Stage 2.		Stage 3.		Honours.		
	Number Examined.		Number Examined.		Number Examined.		Number Examined.		
	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.	1st Class.	2nd Class.	
XXV. Hygiene, . . . . .	56	8	21	22	10	1	1	—	—
	48	6	17	23	2	2	—	—	—
XXVI. Elementary Science of Common Life, . . . . .	36	6	11	—	—	—	—	—	—
	22	16	10	—	—	—	—	—	—
Totals, . . . . .	1376	393	454	744	357	132	16	77	28
	1206	357	472	648	66	332	171	24	72

## SCIENCE EXAMINATIONS (IRELAND)—MATHEMATICS.

	Stages 1 to 7.			Honours.		
	Number Examined.	1st Class.	2nd Class.	Number Examined.	1st Class.	2nd Class.
V. Mathematics,	Division I.	141	61	76	11	2
		200	26	115		
		106	22	44		
		113	18	49		
		87	23	23		
	Division II.	45	19	21	—	—
		2	—	2		
		—	—	—		
		60	7	22		
		26	1	16		
Totals, . . . . .		246	92	173	11	2
		330	88	105	7	6



## ART EXAMINATIONS (IRELAND).

SUBJECT.	Number Examined.	First Class.	Second Class.
Freehand Drawing in Outline, . . . . .	989	193	370
	948	147	405
Drawing in Light and Shade from a Cast, . . . . .	344	20	124
	375	33	127
Model Drawing, . . . . .	607	174	245
	669	118	243
Geometrical Drawing, . . . . .	381	56	139
	419	52	101
Perspective, . . . . .	69	6	42
	77	14	37
Drawing of Common Objects from Memory . . . . .	24	4	6
	15	1	6
Memory Drawing of Plant Form, . . . . .	124	22	69
	113	25	48
Drawing from the Antique, . . . . .	39	7	14
	43	3	21
Drawing the Antique from Memory, . . . . .	9	2	3
	13	—	1
Drawing from Life, . . . . .	42	—	11
	36	3	7
Anatomy, . . . . .	28	7	15
	23	3	16
Painting Ornament, . . . . .	47	1	12
	41	—	20
Painting from Still Life, . . . . .	99	18	22
	69	5	17
Principles of Ornament, . . . . .	58	1	17
	44	1	14
Historic Ornament, . . . . .	14	—	10
	16	5	5
Architecture, . . . . .	7	—	3
	10	2	4
Architectural Design, . . . . .	2	—	—
	3	—	1
Design, Stage I., . . . . .	238	99	125
	220	48	101
Design, Stage II., . . . . .	98	—	14
	80	4	14
Design, Honours, . . . . .	11	—	1
	9	—	4
Modelling the Head from Life, . . . . .	9	2	—
	4	2	—
Modelling from Life, . . . . .	4	—	—
	6	2	1
Modelling from the Antique, . . . . .	26	1	5
	23	2	4
Modelling Design, Stage II., . . . . .	9	—	3
	14	2	3
Modelling Design, Honours, . . . . .	1	—	—
	1	—	—
Totals	3,290 3,358	534 471	1,425 1,263

**King's Prize (Science) Awarded to an Irish Student.**

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject for which Prize was awarded.
Wallace, William K., . . .	Building Construction and Drawing— Stage III.

**Medals gained by Irish Students for securing First Class Successes  
in the Examinations in Honours of Science Subjects.**

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name of Candidate.	Subject for which Medal was awarded.
Blair, Atholl, . . . . .	Machine Construction and Drawing.
Haleull, John B., . . . . .	Practical Plane and Solid Geometry.

DUBLIN: ROYAL COLLEGE OF SCIENCE.

Name of Candidate.	Subject for which Medal was awarded.
Bradley, Joseph, . . . . .	Pure Mathematics—Division I.
West, Arthur E. L., . . . . .	Pure Mathematics—Division I.

TABLE VIII.  
NATIONAL COMPETITION, 1910.

Medals, Prizes and Awards gained by Irish Students.

BANGOR: TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Barnes, Robert,	Design for illustrated cover.	Commended.

BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
Bell, Elizabeth Ann,	Modelled foot from nature.	Commended.
Coomes, William John	Design for damask napkin.	Bronze Medal.
Davson, James A.,	Design for encaustic floor tiles.	Bronze Medal.
Dewar, Charles F.,	Design for damask table-cloth.	Commended.
Dwyer, Frances H.,	Design in outline with tinted ground.	National Book Prize.
Fenton, James,	Design for damask napkin.	Commended.
Godds, Wilhelmina M.	Shaded study of a draped figure from life.	National Book Prize.
	Water-colour painting of a head from life.	Commended.
	Design for a frontispiece.	Commended.
Gilmore, Elizabeth E. F.	Studies of plant form.	Commended.
	Modelled foot from the cast.	Commended.
Grew, Emma G. M.,	Design for a colour print.	Commended.
Harron, George,	Modelled head as relief from cast in the round.	Commended.
Helford, Florence,	Modelled foot from the cast.	National Book Prize.
Kinn, George Mac-	Modelled foot from the cast.	Commended.
Dowell,		
Lekston, Ernest W.,	Design for stained glass.	National Book Prize.
Lilly, Herbert R.,	Three sketches of figures from the nude.	National Book Prize.
Lilly, William,	Design for damask table-cloth.	Bronze Medal.
Montgomery, Harry,	Ornament modelled from the cast.	Commended.
Nelson, Marion,	Design based on a flowering plant.	Commended.
Smith, Joseph,	Three sketches of figures from the nude.	Commended.
Wilson, Edith Eleanor,	Memory sketches of the nude figure.	Commended.
	Studies of birds treated for design.	Commended.

CORK: CRAWFORD MUNICIPAL TECHNICAL INSTITUTE.

Name.	Description of Work.	Award.
O'Farley, Matilda,	Shaded drawing of a head from the antique.	Commended.

## DUBLIN: METROPOLITAN SCHOOL OF ART.

Name.	Description of Work.	Award.
Anglin, Elizabeth.	Studies of plant-form.	Commended.
Burton, Augusta.	Monochrome painting of a figure from the antique.	National Book Prize.
Conley, Lucy Emma.	Studies of plant form.	Commended.
Cutler, Margaret.	Three sketches of figures from the antique.	National Book Prize.
Curry, Phoebe.	Studies of plant form.	Commended.
Deagan, Thomas.	Studies of plant form.	Commended.
Demo, Mary.	Design for enamelled plaque.	Bronze Medal.
Dwyer, May.	Group in oil colours.	Commended.
Evans, Michael.	Modelled bust from the east.	Commended.
Evans, Thos.	Studies of plant form.	Commended.
Evans, Helene.	Designs based on a flowering plant.	Commended.
	Designs based on a flowering plant.	Bronze Medal.
	Design for enamelled plaque.	National Book Prize.
Fox, Kathleen.	Shaded drawing of a figure from the antique.	Commended.
	Shaded drawing of a figure from the antique.	Commended.
	Oil painting of a figure from the antique.	Commended.
Hamilton, May.	Designs for enamelled plaque.	Commended.
Hudson, Julia.	Studies of historic styles of ornament.	Commended.
Holland, Anne.	Studies of plant form.	Commended.
Jennett, Katharine.	Group in oil colours.	Bronze Medal.
Johnstone, Elizabeth.	Design for enamelled plaque.	National Book Prize.
Lakeman, Ernest.	Three sketches of figures from the antique.	Commended.
Lavelle, James.	Designs for stained glass.	Commended.
Lynch, Mary.	Studies of plant form.	Commended.
	Designs for a copper bowl with stand.	National Book Prize.
	Study in stained glass.	Commended.
O'Keefe, Margaret.	Design for damask table cloth.	Commended.
O'Reilly, Nora.	Design for a silver and enamelled basket and cover.	National Book Prize.
Powers, Albert G.	Modelled bust from nature.	Bronze Medal.
	Model of a figure from the antique.	Bronze Medal.
	Modelled design for a bust.	National Book Prize.
Quigley, Kathleen.	Design for enamelled half-bust.	Commended.
Rhoads, Ethel.	Three sketches of figures from the antique.	Commended.
Scott, Gladys.	Design for stained glass.	Commended.
Slater, James.	Studies of plant form.	Commended.
Stokes, Helen.	Studies of plant form.	Commended.
Trotter, Patrick.	Group in oil colours.	National Book Prize.

## LIMERICK: MUNICIPAL SCIENCE, ART, AND TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
O'Flynn, Gertrude.	Group in oil colours.	Commended.

## LURGAN: MUNICIPAL TECHNICAL SCHOOL.

Name.	Description of Work.	Award.
Morris, Fred A.	Design for damask table napkin.	Bronze Medal.

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TABLE IX.

EXAMINATIONS IN SUBJECTS OF TECHNOLOGY  
(IRELAND), 1910.

## Summaries of Results.

Year.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes.
1910, . . . . .	387	508	15
1909, . . . . .	907	512	10
1908, . . . . .	822	446	10
1907, . . . . .	373	493	8
1906, . . . . .	730	377	10

(The corresponding figures for the Examinations of 1900 are given in light type.)

No. of School.	Centre of Examination.	Number of Candidates Examined.	Number of Candidates Passed.	Number of Prizes.
6387	Armagh : Municipal Technical School, .	8	6	—
6388	Ballymena : Municipal Technical School, .	7	5	—
6389	Ballymore : Technical School, . . .	6	2	—
6390	Ballymore : Technical School, . . .	5	3	—
6391	Ballymore : Fishery School, . . .	4	5	—
6392	Baltimore : Fishery School, . . .	—	—	—
6393	Belfast : Municipal Technical Institute, .	2	1	—
6394	Belfast : Municipal Technical Institute, .	299	168	9
6395	Belfast : Municipal Technical Institute, .	295	174	7
6396	Blackrock : Municipal Technical School, .	8	2	—
6397	Blackrock : Municipal Technical School, .	—	—	—
6398	Carrick-on-Suir : Christian Brothers' Schools, .	—	—	—
6399	Carrick-on-Suir : Christian Brothers' Schools, .	3	3	—
6400	Chennai : Central Technical School, . .	16	14	—
6401	Chennai : Central Technical School, . .	17	3	—
6402	Coleraine : Technical School, . . .	1	1	—
6403	Coleraine : Technical School, . . .	4	4	—
6404	Cork : Crawford Municipal Technical Institute	66	37	—
6405	Cork : Crawford Municipal Technical Institute	85	42	—
6406	Drogheda : Municipal Technical School, .	28	11	—
6407	Drogheda : Municipal Technical School, .	2	1	—
6408	Dublin : City of Dublin Technical Schools, .	299	136	1
6409	Dublin : City of Dublin Technical Schools, .	280	151	3
6410	Dundalk : Municipal Technical School, .	4	—	—
6411	Dundalk : Municipal Technical School, .	2	2	—
6412	Dungannon : Technical School, . . .	—	—	—
6413	Dungannon : Technical School, . . .	2	1	—
6414	Dungannon : Technical School, . . .	2	1	—
6415	Dunblane : Technical School, . . .	—	—	—
6416	Dunblane : Technical School, . . .	2	—	—
6417	Dunblane : Technical School, . . .	—	—	—
6418	Dunblane : Technical School, . . .	2	—	—
6419	Dunblane : Technical School, . . .	—	—	—
6420	Dunblane : Technical School, . . .	—	—	—
6421	Dunblane : Technical School, . . .	—	—	—
6422	Dunblane : Technical School, . . .	—	—	—
6423	Dunblane : Technical School, . . .	—	—	—
6424	Dunblane : Technical School, . . .	—	—	—
6425	Dunblane : Technical School, . . .	—	—	—
6426	Dunblane : Technical School, . . .	—	—	—
6427	Dunblane : Technical School, . . .	—	—	—
6428	Dunblane : Technical School, . . .	—	—	—
6429	Dunblane : Technical School, . . .	—	—	—
6430	Dunblane : Technical School, . . .	—	—	—
6431	Dunblane : Technical School, . . .	—	—	—
6432	Dunblane : Technical School, . . .	—	—	—
6433	Dunblane : Technical School, . . .	—	—	—
6434	Dunblane : Technical School, . . .	—	—	—
6435	Dunblane : Technical School, . . .	—	—	—
6436	Dunblane : Technical School, . . .	—	—	—
6437	Dunblane : Technical School, . . .	—	—	—
6438	Dunblane : Technical School, . . .	—	—	—
6439	Dunblane : Technical School, . . .	—	—	—
6440	Dunblane : Technical School, . . .	—	—	—
6441	Dunblane : Technical School, . . .	—	—	—
6442	Dunblane : Technical School, . . .	—	—	—
6443	Dunblane : Technical School, . . .	—	—	—
6444	Dunblane : Technical School, . . .	—	—	—
6445	Dunblane : Technical School, . . .	—	—	—
6446	Dunblane : Technical School, . . .	—	—	—
6447	Dunblane : Technical School, . . .	—	—	—
6448	Dunblane : Technical School, . . .	—	—	—
6449	Dunblane : Technical School, . . .	—	—	—
6450	Dunblane : Technical School, . . .	—	—	—
6451	Dunblane : Technical School, . . .	—	—	—
6452	Dunblane : Technical School, . . .	—	—	—
6453	Dunblane : Technical School, . . .	—	—	—
6454	Dunblane : Technical School, . . .	—	—	—
6455	Dunblane : Technical School, . . .	—	—	—
6456	Dunblane : Technical School, . . .	—	—	—
6457	Dunblane : Technical School, . . .	—	—	—
6458	Dunblane : Technical School, . . .	—	—	—
6459	Dunblane : Technical School, . . .	—	—	—
6460	Dunblane : Technical School, . . .	—	—	—
6461	Dunblane : Technical School, . . .	—	—	—
6462	Dunblane : Technical School, . . .	—	—	—
6463	Dunblane : Technical School, . . .	—	—	—
6464	Dunblane : Technical School, . . .	—	—	—
6465	Dunblane : Technical School, . . .	—	—	—
6466	Dunblane : Technical School, . . .	—	—	—
6467	Dunblane : Technical School, . . .	—	—	—
6468	Dunblane : Technical School, . . .	—	—	—
6469	Dunblane : Technical School, . . .	—	—	—
6470	Dunblane : Technical School, . . .	—	—	—
6471	Dunblane : Technical School, . . .	—	—	—
6472	Dunblane : Technical School, . . .	—	—	—
6473	Dunblane : Technical School, . . .	—	—	—
6474	Dunblane : Technical School, . . .	—	—	—
6475	Dunblane : Technical School, . . .	—	—	—
6476	Dunblane : Technical School, . . .	—	—	—
6477	Dunblane : Technical School, . . .	—	—	—
6478	Dunblane : Technical School, . . .	—	—	—
6479	Dunblane : Technical School, . . .	—	—	—
6480	Dunblane : Technical School, . . .	—	—	—
6481	Dunblane : Technical School, . . .	—	—	—
6482	Dunblane : Technical School, . . .	—	—	—
6483	Dunblane : Technical School, . . .	—	—	—
6484	Dunblane : Technical School, . . .	—	—	—
6485	Dunblane : Technical School, . . .	—	—	—
6486	Dunblane : Technical School, . . .	—	—	—
6487	Dunblane : Technical School, . . .	—	—	—
6488	Dunblane : Technical School, . . .	—	—	—
6489	Dunblane : Technical School, . . .	—	—	—
6490	Dunblane : Technical School, . . .	—	—	—
6491	Dunblane : Technical School, . . .	—	—	—
6492	Dunblane : Technical School, . . .	—	—	—
6493	Dunblane : Technical School, . . .	—	—	—
6494	Dunblane : Technical School, . . .	—	—	—
6495	Dunblane : Technical School, . . .	—	—	—
6496	Dunblane : Technical School, . . .	—	—	—
6497	Dunblane : Technical School, . . .	—	—	—
6498	Dunblane : Technical School, . . .	—	—	—
6499	Dunblane : Technical School, . . .	—	—	—
6500	Dunblane : Technical School, . . .	—	—	—

## EXAMINATIONS IN SUBJECTS OF TECHNOLOGY (IRELAND), 1910—CON

No. of School	Centre of Examination.	Number of Candidates Examined	Number of Candidates Passed.	Number of Prizes.
0639	Limerick: Municipal Science, Art and Technical Schools.	65	22	1
0637	Londonderry: Municipal Technical School.	30	15	—
0637	Londonderry: Municipal Technical School.	30	15	1
0637	Lurgan: Municipal Technical School.	32	14	—
0637	Lurgan: Municipal Technical School.	30	17	1
0643	Maghamsett: Technical School.	16	16	—
0643	Maghamsett: Technical School.	1	1	—
0694	Navan: Technical School.	—	—	—
0694	Navan: Technical School.	11	4	—
0644	Newry: Municipal Technical School.	17	10	—
0644	Newry: Municipal Technical School.	8	4	—
0645	Newtownards: Municipal Technical School.	8	—	—
0645	Newtownards: Municipal Technical School.	6	3	—
0697	Omagh: Technical School.	1	1	—
0697	Omagh: Technical School.	—	—	—
0604	Quinborough: Technical School.	13	9	—
0604	Quinborough: Technical School.	17	8	—
0606	Rathfriland: School of Domestic Economy.	1	—	—
0642	Rangwood: Peninsula Technical School.	20	13	—
0642	Rangwood: Peninsula Technical School.	24	11	—
0743	Sligo: Municipal Technical School.	7	3	—
0671	Sligo: Municipal Technical School.	4	2	—
0671	Sligo: Municipal Technical School.	14	6	—
0677	Trillick: Central Technical School.	10	7	—
0677	Trillick: Central Technical School.	16	11	—
0677	Trillick: Central Technical School.	18	12	—
0692	Wicklow: Technical School.	1	—	—
	Totals.	887	588	15
		937	512	10

## Prizes and Medals gained by Irish Students.

## BELFAST: MUNICIPAL TECHNICAL INSTITUTE.

NAME.	Subject.	Grade.	Place taken at Examination.	[Prize.
Benson, Arthur Langstaff.	Flax Spinning.	Ordinary.	First.	52 (Clothwork) and Bronze Medal.
Chaple, Rachel Macdonald.	Millinery.	—	Second.	42 (Needlework) and Bronze Medal.
Coulter, John William.	Linen Weaving (Designing).	Honours.	First.	23 (Clothwork) and Silver Medal.
Livingston, Hamilton.	Linen Weaving (Braid Management).	Honours.	First.	23 (Clothwork) and Silver Medal.
O'Brien, Thomas Marshall.	Flax Spinning.	Ordinary.	Second.	51 3ds (Clothwork) and Bronze Medal.
Fairbairn, Fred.	Cotton and Linen Knitting and Sewing.	Ordinary.	Third (equal).	Bronze Medal.
Radcliffe, Francis William.	Flax Spinning.	Ordinary.	Third.	Bronze Medal.
Smith, Stephen Noel M.	Linen Weaving.	Ordinary.	First.	23 (Clothwork) and Bronze Medal.
Wardlaw, William S. L.	Flax Spinning.	Honours.	First.	23 (Clothwork) and Silver Medal.

## Prizes and Medals gained by Irish Students—continued.

## DUBLIN: CITY OF DUBLIN TECHNICAL SCHOOLS.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Coolson, Richard, . . .	Motor Car Engineering.	Ordinary.	First.	£2 (Founders) and Bronze Medal.

## FERMOY: TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Coughlan, Patrick, . . .	Brickwork, .	Honour.	Second.	£2 10s. (Tykers and Brackley) and Silver Medal.

## GALWAY: CITY OF GALWAY TECHNICAL INSTITUTE.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Byrne, Patrick, . . . .	Telegraphy, .	Ordinary.	Third.	Bronze Medal.

## LIMERICK: MUNICIPAL SCIENCE, ART AND TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Candon, John, . . . . .	Tailors' Cutting.	Ordinary.	Third.	Bronze Medal.

## LONDONDERRY: MUNICIPAL TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Curtis, Robert, . . . . .	Plesters' Work.	Ordinary.	Second, (equal).	£1 10s. (Plesters) and Bronze Medal.

## Prizes and Medals gained by Irish Students—continued.

## LURGAN: MUNICIPAL TECHNICAL SCHOOL.

Name.	Subject.	Grade.	Place taken at Examination.	Prize.
Harrison, Joseph.	Linen Weaving.	Ordinary.	Third.	Bronze Medal.

LIST of IRISH CANDIDATES awarded SCHOLARSHIPS and EXHIBITIONS offered by the WORSHIPFUL COMPANY of DRAPERS on the results of the Examinations of the City and Guilds of London Institute in the several branches of TEXTILE MANUFACTURE.

*One Scholarship of the Annual Value of £60, in addition to College Fees, tenable for two years.*

Coalter, John W. (Linen Weaving)—Belfast: Municipal Technical Institute.

*Four Exhibitions of the Annual Value of £10, tenable for two years.*

Armstrong, John (Linen Weaving)—Belfast Municipal Technical Institute.

Dermott, James (Linen Weaving)—Lurgan: Municipal Technical School.

McClatchey, John (Linen Weaving)—Lurgan: Municipal Technical School.

Oldham, Thomas H. (Flax Spinning)—Belfast: Municipal Technical Institute.

EXTRACT from the ANNUAL REPORT of the City and Guilds of London Institute for the SESSION 1909-10.

"The number of registered classes in Technology and of students in attendance both show a slight decrease as compared with last year, from 229 to 196, and from 2,741 to 2,567 respectively, and the number of successful candidates is 508 as compared with 512, but 15 prizes have been gained as against 10 last year. At the examination in Manual Training, two candidates qualified for the Teachers' Certificate in Woodwork, and three passed the First Year's examination in that subject, and two the First Year's examination in Metalwork. Of the Scholarships and Exhibitions in Textiles, offered by the Drapers' Company, one Scholarship and four Exhibitions were awarded to Irish students (see page 156)."



# ROYAL COLLEGE OF SCIENCE, DUBLIN.

## FORTY-SECOND ANNUAL REPORT OF THE DEAN AND COUNCIL FOR THE ACADEMICAL YEAR, 1909-1910.

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit to you the Forty-Second Annual Report of the Council of the Royal College of Science.

During the Session 1909-10 there were four Royal Scholars, fifteen Science Scholars, thirty Agricultural Scholars (including two in Horticulture and one in Forestry), fourteen Teachers-in-Training, one Local Exhibitioner, one Special Research Student, four post-graduate Students, two free Students attending special courses, twenty-nine fee-paying Associateship Students, and twenty-six occasional students paying fees. The total number of individual students in the College during the Session was one hundred and twenty-six.

Sessional examinations were held in thirty-seven subjects, and conjoint examiners were appointed by the Department in twenty-five subjects.

The annual award of diplomas, scholarships, and prizes was made by the Council on the 29th of June, 1910.

Short Summer Vacation Courses to Science Teachers were given in the following subjects:—

Chemistry. . . . .	Third Year, to 37 students
	Fourth Year, to 24 "
Physics, . . . . .	First Year, to 50 "
	Third Year, to 23 "
	Fourth Year, to 8 "
Mechanical Science. .	Third Year, to 7 "
	Fourth Year, to 6 "
Botany, . . . . .	Fourth Year, to 5 "
Rural Economy, . . . .	30 "
Hygiene and Sick Nursing, . . . .	19 "
Total of individual students, . . .	209

Mr. Otway H. Little, B.A., A.R.C.Sc.I., was appointed Assistant to the Professor of Geology, and Mr. Henry Webster Moss was appointed the Junior Assistant to the Professor of Chemistry.

The following students were awarded the Diploma of Associate of the Royal College of Science on the results of the Sessional Examinations in 1910:—

*Faculty of Engineering.*—Mr. R. J. Dods, Mr. J. P. M. Hackett, Mr. E. McConnell, Mr. W. M. Stephenson, Mr. F. M. Wookey.

*Applied Chemistry.*—Mr. J. R. Douglas, Mr. J. E. Elliott, Mr. B. G. Fagan, Mr. W. H. Knott.

*Agriculture.*—Mr. James Duffy, Mr. Martin Gleeson. Mr. John Jennings, Mr. Charles C. Maguire, Mr. Patrick F. Moloney, Mr. Gerald O. Sherrard.

*Teachers-in-Training.*—Miss MacDowell, Nat. Sci.; Mr. P. Rocks, Physics; Mr. J. B. Coghill, and Mr. J. Le Court, Chemistry.

Mr. Isaac Swain, A.R.C.S.C.I., B.A., Assistant to the Professor of Geology, was appointed Professor of Geography and Geology in University College, Cork.

#### 1851 Exhibition Research Scholarships:—

Mr. Alfred George Gordon Leonard, A.R.C.S.C.I., B.Sc., Lond., whose 1851 Exhibition Research Scholarship of £150 per annum had been renewed for a second year in 1909, completed his studies and took the degree of Ph.D. *cum magna laude* at the University of Bonn.

Mr. Joseph Ivon Graham, A.R.C.S.C.I., took the degree of B.Sc. with Honours in Chemistry in the University of London. He was awarded by the Royal Commission of the 1851 Exhibition a Science Research Scholarship of the value of £150 per annum, and having elected to study at Cambridge he was also awarded a Research Studentship of £50 a year at Emmanuel College, Cambridge.

Mr. Richard Coulson who obtained his Associateship in Engineering in 1909, and was appointed second assistant in the Drawing Schools for the Session, was successful in gaining a Daimler Scholarship with admission to the Daimler Motor Engineering Works. He also gained Bronze and Silver Medals at the City and Guilds of London Examinations in Engineering.

At the commencement of last Session the Council were informed of the very serious illness of Professor James Lyon, M.A., which, to their great regret, shortly afterwards terminated in his decease. He was a strenuous worker, possessing great experience in different branches of engineering, and his death was consequently a great loss to the College.

The duties appertaining to the Chair of Engineering were satisfactorily carried on by the Lecturer, Mr. J. Taylor, M.A., A.R.C.S.C.I., and the Assistant, Mr. John Ingram, B.Sc., A.R.C.S.C.I.

The Department appointed Mr. H. H. Jeffcott, B.A.L., Mem. Inst. Mech. E., to the Professorship of Engineering in May, 1910.

A limited number of Research Studentships have been established for those who desire to prosecute special investigations.

I have the honour to be, Sir,

Your obedient Servant,

W. N. HARTLEY.

## CHEMISTRY.

Professor:—W. N. HARTLEY, D.Sc., F.R.S.

The number of students attending the courses of Chemistry were:—Forty-three of the first year, twenty of the second year, eleven of the third year, including one occasional student.

To the students of the first year sixty lectures were delivered by the Professor on General Chemistry, including the outlines and principles of Metallurgy and Thermo-Chemistry.

In the chemical laboratories there were forty-five students of the first year, in charge of Dr. Pollok and Mr. Graham, and one in the assaying laboratory.

The total number of students attending the various courses in Chemistry was eighty.

The division of the lectures on Organic Chemistry into two courses, elementary and advanced, referred to in the report of last year was carried on as before, with a short concurrent elementary practical course in that subject for the students in the Faculty of Agriculture. These courses were given by Mr. O'Farrelly.

## RESEARCH WORK.

A good deal of work was in progress in the course of the year. Mr. J. Iven Graham was engaged on an investigation of "The Absorption Spectra of Sulphur Vapour at Different Temperatures and Pressures, and their Relation to the Molecular Complexity of this Element," which was read at a meeting of the Royal Society on June 23rd, 1910; and has since been published.

*Proc. Roy. Soc. A.* Vol. 84, p. 311.

A portion of Mr. A. G. G. Leonard's work for his Dissertation was executed in the Chemical Laboratory during the vacation, and Mr. Otway H. Little was also engaged in investigating the influence of light on certain Chemical reactions in such time as he could be spared from his duties as Assistant to the Professor of Geology.

## ORGANIC CHEMISTRY.

Lecturer:—A. O'FARRELLY, M.A.

During the Session, 1909-10, forty-seven lectures on Organic Chemistry were delivered by the Lecturer, attended by ten students of the second year, one occasional student, and those students of the third year who desired to attend. The eight introductory lectures of this course were attended by ten agricultural students, who also followed, in the third term, a course of ten lectures specially suited to their requirements.

A course of lectures on recent work in Organic Chemistry and the principles of Physical Chemistry was also given to the students of the third year.

- In the laboratory there were ten students of the second year working principally at Mineral Analysis, and eleven students of the third year (including one occasional student) who were engaged at advanced Mineral Analysis and Organic Chemistry.

In the third term a special practical course on Organic Chemistry of about twenty hours was attended by ten agricultural students.

At the close of the Session a tour, aided financially by the Department, was organised by the Lecturer for the purpose of visiting chemical works in the neighbourhood of Liverpool and Manchester.

Eleven students, accompanied by Messrs. O'Farrelly and Graham, took part in the tour, which lasted from the 20th to the 25th June, and the following works were visited:—

Mersey White Lead Works (Warrington).  
Walker's Brewery (Warrington).  
Crossfield's Soap and Alkali Works (Warrington).  
United Alkali Co.'s Works (Widnes).  
Broughton Copper Co.'s Works (Ditton).  
Lever's Soap Works (Port Sunlight).  
Price's Candle and Glycerine Works (Birkenhead).  
Fairrie's Sugar Refinery Works (Liverpool).  
British and Helsby Insulated Cable Works (Prescot).  
Wigan Coal and Iron Co.'s Works (Wigan).  
Manchester Corporation Sewerage Works (Davyhulme).

## ELECTRO-TECHNOLOGY AND PHYSICS.

### ELECTRO-TECHNOLOGY.

PROFESSOR:—W. BROWN, B.Sc., M.I.E.E.

There were 21 students in the second year, viz., ten in the Faculty of Engineering, two in the Faculty of Applied Chemistry, eight Teachers in Training, and one occasional student.

Fifty lectures were delivered by the Professor, the whole of which were attended by the Engineering students, thirty-three by the Teachers in Training, and eighteen by the students of Chemistry. There were seventeen Tutorial classes given by Mr. Allen.

The Laboratory work consisted of sixty-two lessons given by the Professor and Mr. Allen, the whole of which were attended by the Engineers, forty-three by the Teachers in Training, and twenty-seven by the Chemists.

The course in the Third Year consisted of fifty-seven lectures delivered by the Professor, attended by four students, and eighty-seven Laboratory lessons, including dynamo design and drawing, under the Professor and Mr. Allen.

During the session the Third Year students in Engineering were taken to visit the following works:—

- (a) The War Ships at Kingstown.
- (b) The Electric Power Stations at (1) Ringsend, (2) Fleet Street, (3) Rathmines, (4) Pigeon House Fort.

The Professor, as Chairman of the Dublin Local Section of the Institute of Electrical Engineers, gave an opening address on the "Magnetic Testing of Iron," an abstract of which was published in the Journal of the Institute; he also read the following paper

before the Royal Dublin Society, which was published in their Scientific Proceedings, "Mechanical Stress and Magnetisation of Iron, Part 3."

Mr. William J. Lyons, B.A., A.R.C.S.C. (LOND.), read a paper before the Royal Dublin Society on "The Distribution of mean annual rainfall and average number of rain-days per year over an area including counties Dublin, Wicklow, Kildare, and Meath: a study in local variation of rainfall," which was published in their Scientific Proceedings.

### PHYSICS.

LECTURER:—FELIX E. HACKETT, M.A., B.Sc., PH.D.

The course of instruction in the first year consisted of sixty-two lectures and sixty-two laboratory lessons. It was attended by forty-two students, of whom thirty-eight were associate students and four were non-associate students.

The course of instruction in the second year consisted of thirty-seven lectures and thirty-three laboratory lessons. It was attended by twenty associate students, of whom ten were in the Faculty of Engineering, two were in the Faculty of Applied Chemistry, and eight were Teachers-in-Training.

The course for the third year was taken by one Teacher-in-Training, who received sixty lectures and carried out a course of advanced work in the laboratory during the year.

The general work in the laboratory was in charge of Mr. W. J. Lyons, B.A., A.R.C.S.C.L., and Mr. P. W. Warwick, B.A., B.Sc., under the direction of the Lecturer.

The Lecturer attended the International Congress of Radiology and Electricity, held at Brussels, September, 1910.

The following paper was published during the session by the Lecturer, in collaboration with Professor R. W. Wood, Baltimore, U.S.A.:—

"The Resonance and Magnetic Spectra of Sodium Vapour." (*Astrophysical Journal*, Dec., '09.)

### MATHEMATICS.

PROFESSOR:—W. McF. ORR, M.A., F.R.S.

In the department of Mathematics, the following lectures were delivered:—

To first year students—Eighty-five lectures on Mathematics, by Professor Orr; eighty-eight lectures on Mathematics, by Dr. Johnston; sixty-three lectures on Mechanics, by Professor Orr (these last were attended by second year Agricultural Students).

To second year students (other than those in Agriculture)—Forty-four lectures on Mathematics, by Professor Orr; thirty-two lectures on Mathematics, by Dr. Johnston; thirty-nine lectures on Mechanics, by Professor Orr; thirty lectures on Mechanics, by Dr. Johnston.

To third year students—Forty-two lectures on Thermodynamics, by Professor Orr; sixty-six lectures on Applied Mechanics,

by Professor Orr; nineteen lectures on Mechanism, by Dr. Johnston; thirteen lectures on Mathematical Physics, by Professor Orr; fifty-five lectures on Mathematical Physics, by Dr. Johnston.

A class of an hour's duration in Mathematical Exercises attended by first year students was held on twenty-seven occasions by Dr. Johnston. An additional course of lectures was also given by Professor Orr to the more advanced second year students.

## AGRICULTURE.

PROFESSOR:—JAMES WILSON, M.A., B.Sc.

In 1909-10 there were six ordinary students of Agriculture and, for one term, a student of Horticulture in the agricultural class which was conducted in a part of the Bacteriological Laboratory.

## AGRICULTURAL BIOLOGY.

LECTURER:—DAVID HOUSTON, F.L.S.

Two courses of instruction with accompanying laboratory work were given to the Agricultural Students of the third year, as follows:—

1. Agricultural Botany (including field work) given in the first term. One Horticultural Student attended the classes. Dr. Pettybridge assisted the lecturer and, in addition, gave a special series of demonstrations on the diseases of farm crops. All the students passed the sessional examination with credit.

2. Agricultural Bacteriology taken during the third term. All the students passed with credit the qualifying examination for the diploma of the College.

## AGRICULTURAL CHEMISTRY.

LECTURER:—GEORGE STEPHENSON.

This course, which comprised thirty lectures and fifty-two laboratory lessons, was attended by seven students, all of them candidates for the Associateship, six in Agriculture and one in Horticulture. The remark made in the last two reports as to the effect of curtailing the time devoted to this subject still holds good. During the year Mr. Brownlee's paper detailing his work on the composition of Irish butters was published, and an epitome of his findings circulated by the Department. Subsequently he has been engaged, on behalf of the Albert College Farm, in an investigation into the composition of liquid manure.

## GEOLOGY AND MINERALOGY.

PROFESSOR:—GRENVILLE A. J. COLE, M.R.I.A., F.G.S.

The following courses were carried out, as arranged for in the Programme of Studies:—

I. *Mineralogy*.—Thirty lectures by the Professor, and twenty-two days' practical work, attended by ten students of the Faculty

of Chemistry in their third year. These students also attended a field excursion to the Beuparc Copper Mine in May, 1910.

II. *Geology*.—Fifty-two lectures by the Professor, and forty-one days' practical work, including six field excursions, attended by ten students of the Faculty of Agriculture in their second year and one occasional student. The Cretaceous and igneous region near Belfast was included in the field-work.

III. *Geology for Teachers in Training* in their third year.—The same course as in the Faculty of Agriculture, with additional practical lessons in petrography and palaeontology, attended by one student.

IV. *Geology for Teachers in Training* in their second year.—Thirteen lectures and eighteen days' practical work, including six field-excursions, attended by eight students. The field-work was of a varied character, to correspond with the geographical nature of the course, and included simple surveying near Dundrum, and a visit to the Boyne Valley between Beuparc and Drogheda.

V. *Soil-Physics*.—Six lectures and ten days' practical work, including a field excursion to the Department's Station at Ballyhaise, to observe types of soil and their relations to surface-features; attended by ten students of the Faculty of Agriculture.

Among the additions to the apparatus and material of the Geological division were the following:—

A card-catalogue of papers on Irish Geology, drawn up by Mr. A. Ruxton under guidance of the Professor.

Nowacki's improved borer for soil-sampling.

Model of central Skye, geologically coloured, by Mr. R. F. Winnall.

A series of named species of graptolites, received from the Sedgwick Museum, Cambridge, in exchange for a specimen of *Archæonodon*.

The Professor was nominated by the Department as a delegate from the Royal College of Science to the Eleventh International Geological Congress in Stockholm in August, 1910. Apart from the many meetings in which questions affecting Irish geology were raised, he was enabled to take part in the admirably organised expedition to Spitsbergen under Baron de Geer, which took place before the Congress, and during which the phenomena of a waning ice-age and consequent "drift" deposits were studied in the field.

The following papers were published:—

"A late glacial clay at Templeogue, Co. Dublin," by G. A. J. Cole. *Irish Naturalist*, 1909, p. 232.

"On rock-specimens dredged from the floor of the Atlantic off the coast of Ireland, and their bearing on submarine geology," by G. A. J. Cole and T. Crook, A.R.C.S.I., *Mem. Geol. Survey of Ireland*, 1910.

"The Picture-Rock or Scribed Rock near Rathmullan, in the County of Donegal," by G. A. J. Cole. *Proc. R. Irish Acad.*, vol. xxviii., sect. B., 1910, p. 113.

## BOTANY.

PROFESSOR:—T. JOHNSON, D.Sc., F.L.S., M.R.I.A.

The usual courses of instruction were given. Ten Agricultural scholars attended twenty-nine lectures and forty lessons in the laboratory and field excursions in the second year. Eight Science Teachers attended twenty-two lectures and twenty-six laboratory lessons and field excursions also in their second year. One third year teacher and two occasional students devoted the whole of the third term of the session to Structural, Systematic and Physiological Botany. One student in the Faculty of Agriculture devoted the whole term to a course in Vegetable Pathology.

With the passing of the Weeds and Seed Act the Professor of Botany ceased to be director of the Department's Seed-testing Station, and was placed in a position to devote his whole time to the duties of his chair in College and Museum. The College teaching benefits largely from the Museum collections, and the courses in Vegetable Pathology could not be satisfactorily conducted without the help afforded by the valuable collection of Fungi in the Museum.

Papers published:—

1. T. Johnson and J. Adams: Bacterial Rot in Turnips and other Brassicas in Ireland. *Econ. Procs. R.D.S.* Vol. II., No. 1, 1910.
2. T. Johnson and Miss R. Hensman: Agricultural Seeds and their Weed Impurities. A Source of Ireland's Alien Flora. *Sc. Procs. R.D.S.*, Vol. XII., N.S. No. 83, 1910.
3. T. Johnson: Die Flora von Irland (with photographic illustrations by R. Welch). 8te Reihe, Hft. 5a, 6, 1910. "*Vegetationsbilder.*"

## ZOOLOGY.

PROFESSOR:—GEORGE H. CARPENTER, D.Sc., M.R.I.A.

*Teaching.*—The second year students of the Faculty of Agriculture received the usual course of instruction in Zoology during the first term. Eleven students attended fifty-seven days' laboratory work and fifty-two lectures; all worked satisfactorily and passed the sessional examination. The course for third year Teachers in Training, held concurrently, was attended by one associate and one occasional student. This course included fifty-seven days' laboratory work and fifty lectures from the Professor, and thirteen special lectures in Hygiene by Dr. Clarke. Both students passed their sessional examination with credit.

A new third year course in Entomology was established for a Horticultural scholar of the Faculty of Agriculture. This student worked practically at the subject under the personal advice of the Professor for a day a week during both the first and third terms. He passed his final examination with much credit. The students of the above-mentioned courses received zoological instruction on six of their field excursions during the second and third terms.

In the third term the short course for second year Teachers in Training was attended by eight students, seven of whom passed



the sessional examination. The course consisted of twenty laboratory lessons with the same number of lectures and four field-days.

A special course of fifteen days' practical work in Entomology was given by the Professor during the third term to a medical officer of the West African Colonial service. Also during the first term an officer of the Royal Army Medical Corps attended the entomological part of the zoological course and did special advanced work on blood-sucking Diptera.

*Albert College.*—During the second term the Professor again conducted nine evening classes for horticultural students from the Albert College, and visited that College on eighteen days to give zoological lessons to the agricultural students there.

*Delegations.*—The Professor attended, as delegate from the College, the first International Congress of Entomology at Brussels and the International Zoological Congress at Graz during August. In September he visited London to attend an important meeting of the British Association's Committee on Economic Ornithology, held at the offices of the Board of Agriculture. He was also present in July at the Annual Meeting, held at Manchester, of the Association of Economic Biologists, of which he was elected President.

*Research.*—During the first term Mrs. Henn-Collins, B.Sc., F.L.S., worked for several weeks in the zoological laboratory, continuing researches, which she had begun at the Imperial College of Science, London, into the anatomy of parasitic copepoda. Unfortunately illness and subsequent removal from Ireland to England prevented the completion of these researches in our laboratory. But the application for permission to carry on this research has led to official sanction for the College to accommodate a limited number of Research Students every year.

The following zoological papers were published during the session:—

By G. H. Carpenter—

On some Subantarctic Collembola, in *Reports of Subantarctic Islands of New Zealand*. Wellington, N.Z., 1909.

Pycnagonida from the Red Sea and Indian Ocean. *Linn. Soc. Journ. Zool.*, Vol. xxxi., 1910.

The Species of Hemimerus and their Distribution. *Ent. Mo. Mag.*, Vol. xx., 1909.

Injurious Insects and other Animals observed in Ireland during the year 1909. *Econ. Proc., R.D.Soc.*, Vol. ii., 1910.

By G. H. Carpenter and T. H. Corson—

The Warble Flies: Third Report on Experiments as to Life History and Treatment. *Journ. Dept. Agric. and Tech. Inst., Irel.*, Vol. x., 1910.

## ENGINEERING.

LECTURES:—J. TAYLOR, M.A.

In the Department of Engineering the following courses of instruction were given during the session.

To the first year students a course in Practical Geometry and

Mechanical Drawing of thirty-two lectures and thirty-two practical lessons; attended by thirty-nine students.

To the second year Engineering students a course in Machine Engineering, Hydraulic Engine, and Turbine Design, of sixty-two lessons in the drawing schools, and fifty-six in the workshop and laboratory attended by ten students.

To the third year Engineering students a course in Structural Engineering, Hydraulic Engine and Turbine Design, of sixty-nine lectures and 123 lessons in the engineering schools attended by five students; and a course in Surveying and Levelling of twenty-nine lectures, eight days' field work, and twenty-nine lessons in Mapping and Plotting attended by ten students.

To the second year Agricultural students a course in Surveying and Levelling of seventeen lectures, seven days' field work, and seventeen lessons in Mapping and Plotting; attended by ten students.

To the third year Agricultural students a course in General Engineering Work of nineteen lectures and nine lessons in the engineering schools and workshops.

A two cylinder petrol engine was constructed in the workshop during the session, and now forms part of our experimental plant.

## REPORT OF THE REGISTRAR OF THE ROYAL COLLEGE OF SCIENCE FOR IRELAND FOR THE SESSION 1909-10.

The number of Students who attended the College during the Session 1909-10 was 126; of these 26 were Non-Associate Students and 92 Associate Students undergoing a three-year course. In addition there were four post-graduate Students, one local exhibitor, one special research Student, and two free Students attending special courses.

The corresponding numbers of Associate and Non-Associate Students for the past five years were:—

Session.	Associates.	Non-Associates.
1904-5, .. .. .	101 .. ..	28
1905-6, .. .. .	83 .. ..	38
1906-7, .. .. .	68 .. ..	38
1907-8, .. .. .	73 .. ..	33
1908-9, .. .. .	85 .. ..	32

The 92 Associates were divided as follows:—

First Year, .. .. .	.. .. .	38
Second Year, .. .. .	.. .. .	30
Third Year, .. .. .	.. .. .	24

The following Third Year Students passed their final seasonal examinations and were awarded the Diploma of Associateship of the College:—

*Faculty of Engineering.*—Mr. Robert J. Doda, Mr. Joseph P. M. Hackett, Mr. Edgar McConnell, Mr. Frederick M. Woskey, Mr. Wilson M. Stephenson.

*Faculty of Applied Chemistry.*—Mr. John P. Douglas, Mr. Joseph C. Elliott, Mr. Bernard G. Fagan, Mr. William H. Knott.

*Faculty of Agriculture.*—Mr. James Duffy, Mr. Martin Gleeson, Mr. John Jennings, Mr. Charles C. Maguire, Mr. Patrick F. Moloney, Mr. Gerald O. Sheppard.

*Teachers-in-Training, Chemistry Section.*—Mr. John B. Coghill, Mr. John LeCourt.

*Physics Section.*—Mr. Patrick Rocks.

*Natural Science Section.*—Miss Mabel C. McDowell.

The two Royal Scholarships offered for competition to Associate Students of the First Year, who are not Science and Technological Scholars, Teachers-in-Training, Local or other Exhibitioners, were awarded to Mr. Arthur F. O'Dowd and Mr. Richard J. England, these Students having obtained the highest marks amongst those eligible for competition at the Seasonal examinations for the First Year Course, held in June, 1910.

The Silver Medal offered for competition to all First Year Associate Students was won by Mr. William M. O'Riordan.

The following is a complete list of Scholarships, Medal, and Prizes awarded on the results of the Seasonal examinations:—

## 1909-10.

Silver Medal, .. .. .	..	..	Mr. W. M. O'Riordan.
First Royal Scholarship, .. .. .	..	..	Mr. A. F. O'Dowd.
Second Royal Scholarship, .. .. .	..	..	Mr. R. J. England.

## PRIZES.

## FIRST YEAR.

<i>Mathematics</i> .—Upper Division.—O. McKenna, 1st. W. M. O'Riordan, 2nd.	
<i>Mathematics</i> .—Lower Division.—W. McLean, 1st. M. Caffrey, 2nd.	
<i>Mechanics</i> .—W. M. O'Riordan, 1st. O. McKenna, 2nd.	
<i>Practical Geometry</i> .—J. J. Lannon } W. M. O'Riordan } Prizes divided.	
<i>Experimental Physics</i> .—J. Lowry, 1st. P. O'Connor, 2nd.	
<i>Chemistry</i> .—W. McLean, 1st. W. M. O'Riordan, 2nd.	

## SECOND YEAR.

<i>Mathematics</i> .—D. McAlonan, 1st. P. A. McKenna, 2nd.	
<i>Mechanics</i> .—D. McAlonan, 1st. R. W. Dunsan, 2nd.	
<i>Machine Construction</i> .—R. W. Dunsan, 1st. C. L. Pollock, 2nd.	
<i>Physics</i> .—J. Reilly } D. McAlonan } Prizes divided.	
<i>Electro-Technology (Chemists)</i> .—J. Reilly, Prize. (Teachers).—D. Hayes, 1st. Miss Morrow, 2nd.	
(Engineers).—C. L. Pollock, 1st. R. W. Dunsan, 2nd.	
<i>Organic Chemistry</i> .—J. Reilly, 1st. D. Hayes, 2nd.	
<i>Mineral Analysis (Chemists)</i> .—J. Reilly, Prize. (Teachers).—Miss Blair } Miss Morrow } Prizes divided.	
<i>Botany (Teachers)</i> .—Miss Blair, 1st. Miss Dunsan, 2nd.	
<i>Geology (Teachers)</i> .—D. Hayes, 1st. Miss Morrow } 2nd divided. J. H. Cook } ..	
<i>Zoology (Teachers)</i> .—Miss Blair, 1st. Miss Morrow, 2nd.	

## SECOND YEAR, AGRICULTURE

- Botany*.—M. J. German, 1st.  
J. Crowley, 2nd.
- Geology*.—A. Scully, 1st.  
M. J. German, 2nd.
- Zoology*.—A. Scully, 1st.  
M. J. German, 2nd.
- Soil Physics*.—A. Scully, 1st.  
D. McCaw, 2nd.
- Surveying*.—M. J. German } Prizes divided.  
D. McCaw }

## THIRD YEAR.

- Mathematical Physics (Teachers)*.—P. Rocks, Prize.
- Thermodynamics*.—H. R. S. O'Riordan } Prizes divided.  
J. B. Coghill }
- Applied Mechanics*.—E. McConnell, Prize.
- Engineering*.—E. McConnell, Prize.
- Surveying*.—E. McConnell 1st.  
J. P. M. Hackett, 2nd.
- Mechanics*.—J. P. M. Hackett, Prize.
- Electro-Technology*.—J. P. M. Hackett } Prizes divided.  
E. McConnell }
- Analytical Chemistry*.—W. G. Rea, 1st.  
A. T. Henley, 2nd.
- Mineralogy*.—J. B. Coghill, 1st.  
J. LeCourt, 2nd.
- Botany (Teachers)*.—Miss McDowell, Prize.
- Geology (Teachers)*.—Miss McDowell, Prize.
- Zoology (Teachers)*.—Miss McDowell, Prize.

## THIRD YEAR, AGRICULTURE.

- Agriculture*.—J. Duffy, 1st.  
P. A. Murphy, 2nd.
- Agricultural Botany*.—P. A. Murphy, 1st.  
P. F. Moloney, 2nd.
- Agricultural Bacteriology*.—C. C. Maguire } Prizes divided.  
P. A. Murphy }
- Agricultural Chemistry*.—C. C. Maguire, 1st.  
J. Jennings, 2nd.
- Veterinary Science*.—P. F. Moloney } Prizes divided.  
P. A. Murphy }
- Rural Economy*.—M. Gleeson, 1st.  
J. Duffy, 2nd.
- Engineering*.—P. A. Murphy, 1st.  
J. Jennings, 2nd.

Short Summer Courses of Lectures and Laboratory work for Teachers engaged in Secondary and Technical Schools throughout the country were held during the month of July in the following subjects:—

- Chemistry, Third Year, attended by 37 Students.  
Chemistry, Fourth Year, attended by 24 Students.  
Physics, First Year, attended by 50 Students.

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Physics, Third Year, attended by 23 Students.  
Physics, Fourth Year, attended by 8 Students.  
Mechanical Science, Third Year, attended by 7 Students.  
Mechanical Science, Fourth Year, attended by 6 Students.  
Botany, Fourth Year, attended by 5 Students.  
Hygiene and Sick Nursing, attended by 19 Students.

At the end of the courses there was a Theoretical and Practical Examination in each subject.

There was also a course on Rural Economy and School Gardening during the month of August. Part of the course was conducted at the Royal College of Science, and the remaining part at the Albert Agricultural College, Glasnevin, and at the Kingstown Technical School Gardens.

P. A. E. DOWLING,  
*Registrar.*

## METROPOLITAN SCHOOL OF ART, DUBLIN.

*Report of the Head Master for the Session, 1909-1910.*

The total number of students who attended the School during the Session 1909-10 was 391, of whom 319 attended the day, and 172 the evening, classes; these included 186 males and 226 females.

In the Personal Art Examinations, held under the Board of Education, the following number of successes were obtained in the subjects named:—

Freehand Drawing in Outline, . . . . .	30
Model Drawing, . . . . .	30
Drawing in Light and Shade from a Cast . . . . .	16
Geometrical Drawing, . . . . .	15
Perspective, . . . . .	11
Memory Drawing of Plant Form, . . . . .	15
Drawing of Common Objects from Memory, . . . . .	4
Design, Stage 1, . . . . .	19
Design, Stage 2, . . . . .	3
Anatomy, . . . . .	11
Drawing from the Antique, . . . . .	6
Drawing from Life, . . . . .	1
Painting Ornament, . . . . .	2
Painting from Still Life, . . . . .	15
Principles of Ornament, . . . . .	6
Historic Ornament, . . . . .	1
Modelling from the Antique, . . . . .	2
Practical Plane and Solid Geometry, Stage 1, . . . . .	1
Elementary Modelling (held by the Department of Agriculture and Technical Instruction for Ireland), . . . . .	7
Drawing on the Blackboard do. . . . .	7
Total, . . . . .	200

The total number of works submitted to the Board of Education for Teachers' Certificates and for the National Competition was 262; of these 113 were for Teachers' Certificates.

The total number of works accepted for Certificates was 48, of which 55 were for the Art Class Teacher's Certificate, and 13 for the Art Master's Certificate, Groups I, II, and III.

In the NATIONAL COMPETITION the School was awarded one Silver Medal, four Bronze Medals, eight National Book Prizes, and twenty-four Commendations as below

*Silver Medal.*—

Power, Albert G., Modelled Bust from Nature (Subject 19a).

*Bronze Medals.*—

Doran, Mary, Design for Enamelled Plaque (Subject 24a).

Evans, Helena, Designs based on a Flowering Plant (Subject 14-22).

Jammett, Katharine, Group in Oil Colours (Subject 14a).

Power, Albert G., Model of a Figure from the Nude (Subject 19a).

*Book Prizes.*—

Binsted, Augusta, Monochrome Painting of a Figure from the Antique (Subject 16a).

Crilly, Margaret, Time Sketches of Figures from the Nude (Subject 8a).

Fox, Kathleen, Design for Enamelled Plaque (Subject 24a).

Johnstone, Elizabeth, Design for Enamelled Plaque (Subject 24a).

Lynch, Mary, Design for a Copper Bowl with Stand (Subject 24a).

O'Kelly, Norah M., Design for a Silver and Enamelled Beaker and Cover (Subject 24a).

Power, Albert G., Modelled Design for a Lunette (Subject 23f).

Taohy, Patrick, Group in Oil Colours (Subject 14a).

*Commended.*—

- Anglin, Elizabeth, Studies of Plant Form (Subject 10).  
 Costello, Lucy E., Studies of Plant Form (Subject 10).  
 Curtis, Phoebe, Studies of Plant Form (Subject 10).  
 Donegan, Thomas, Studies of Plant Form (Subject 10).  
 Draper, May, Group in oil colours (Subject 14a).  
 Drury, Michael, Modelled Head from the east (Subject 19b).  
 Dunson, Una, Studies of Plant Form (Subject 10).  
 Dunson, Una, Design based on a Flowering Plant (Subject 14-22).  
 Fox, Kathleen, Shaded Drawing of a Figure from the Nude (Subject 8c2).  
 Fox, Kathleen, Shaded Drawing of a Figure from the Nude (Subject 8c2).  
 Fox, Kathleen, Oil Painting of a Figure from the Nude (Subject 17c).  
 Hamilton, May, Design for Enamelled Plaque (Subject 24a).  
 Hayden, Julie, Studies of Historic Styles of Ornament (Subject 22d).  
 Halland, Annie, Studies of Plant Form (Subject 10).  
 Lakeman, Ernest, Time Sketches of Figures from the Nude (Subject 8c).  
 Lakeman, Ernest, Design for Stained Glass (Subject 23d).  
 Lavelle, James, Studies of Plant Form (Subject 10).  
 Lynch, Mary, Study in Stained Glass (Subject 24a).  
 O'Keefe, Margaret, Design for Damask Tablecloth (Subject 23c).  
 Quigley, Kathleen, Design for Enamelled Belt Buckle (Subject 24a).  
 Rhind, Ethel, Time Sketches of Figures from the Nude (Subject 8c).  
 Scott, Gladys, Design for Stained Glass (Subject 24a).  
 Slater, James, Studies of Plant Form (Subject 10).  
 Stobo, Helen, Studies of Plant Form (Subject 10).

Under the LOCAL PRIZE SCHEME for 1909-10 prizes were awarded as follows:—

## I.—JUNIOR SECTION.

For the three best sets of works executed in the Junior Section of the Day Class—Agnes Cassidy, Marjorie Findlater, Gladys Martin.

For the three best sets of works executed in the Junior Section of the Evening Class—Ralph Anderson, Peter Farnon, Janet Lawson.

For completed Art Class Teacher's Certificate—Margaret Crilley, Jennie FitzHarris, Mary Lynch, Stephen C. Poole, James Slater.

For completed Irish Secondary Teacher's Drawing Certificate—Agnes Cassidy, Julie Hayden, Joseph Tierney, Evelyn Willis.

## II.—DAME'S SECTION.

For the best sets of studies of plants, chosen with a view to, and executed with appreciation of, their decorative possibility—Thomas Donegan and James Slater (equal).

For the best set of historic studies—Julie Hayden.

For the highest number of marks for a series of designs for given subjects—Jennie FitzHarris.

For the best sets of designs such as are required for Certificate works adapted to the technical requirements of various materials, other than lace—Oliver Hunter, 1st; Nora O'Kelly, 2nd.

For the best lace designs—Hilda Gray, 1st; Bertha Dawes, 2nd.

Prize for Miscellaneous Designs—Margaret O'Keefe, 1st; Dea K. Allen, 2nd.

For the best set of notes and sketches in connection with Advanced Design Lectures—Gladys Scott.

For the best set of notes and sketches in connection with Elementary Design Lectures—Marjorie Drury.

## III.—ARCHITECTURAL SECTION.

Measured Drawings from an approved example—Gladys Scott.

## IV.—DRAWING AND PAINTING SECTION.

- For the best painting of a full length nude figure—Margaret Crilley.  
 For the best drawing in light and shade from the full length nude figure from life—Kathleen Fox.  
 For the best painting of a head from life—Kathleen Fox.  
 For the best set of twelve time studies from the full length nude figure—Margaret Crilley.  
 For the best set of drapery studies—Gladys Scott.  
 For the best anatomical studies and notes—Norah O'Kelly.  
 For the best painting of an antique figure—Kathleen Quigly.  
 For the best painting of a head from an approved cast—Francis Bewe and Lee Whelan (equal).  
 For the best drawing of an antique figure in light and shade—Mary Lynch.  
 For the best memory drawing of an antique figure—Francis Bewe.  
 For the best drawings of a hand, hand, and foot, from approved casts, in light and shade—Catherine Hanbury.  
 For the best painting of a group of still life (in oil colour)—Katherine Jammett.  
 For the best painting of a group of still life (in water colour)—Dora K. Allen.

## V.—MODELLING AND SCULPTURE SECTION.

- For the best model of Figure from Life (in the round)—Albert G. Power.  
 For the best Modelled Study of a draped figure—Rebecca Grima.

## VI.—CRAFT CLASSES.

- Stained Glass—Ernest Lakeman.  
 Enamelling—Mary Doran.  
 Enamelling and Metal work—Norah O'Kelly.  
 Metal Work—Mary Lynch.  
 Leather Work—James Golden.  
 Gesso Work—Annie Holland.

The five Medals, the eight National Book prizes, and the twenty four Commendations which the School has obtained for works sent up to the National Art Competition, have not been confined to one or two stages of Art instruction, but, on the contrary, every stage of Drawing, Painting, Modelling, and Design, including the Crafts or Applied Arts of Metal Work, Enamelling, Textiles, Gesso-work, Leather-work, and Stained Glass, has been recognised and rewarded, which clearly proves that sound and good work has been done in all departments of the Art instruction now afforded at the School.

A high standard of success was also reached in the personal examinations held by the Board of Education, the Students obtaining an unusually large number of certificates. In this connection it may be mentioned that in the case of the examination in Painting from Still Life, eighteen students entered, ten of whom passed "First Class," five "Second Class," and only three failed, this being a record result for the School.

Count Plunkett, Director of the National Museum, for the second time, kindly offered two prizes to the students of the School for the best sets of studies from objects and art examples in the Museum. These prizes have been awarded to Miss Emily G. Andrews and Miss Mary Lynch for studies in Historic Pottery and Stone-carving respectively.

The following TEACHERSHIPS-IN-TRAINING, ART SCHOLARSHIPS, and SILVERSMITHS' (APPRENTICE) SCHOLARSHIPS were renewed and awarded by the Department during the Session 1909-10:—

Teacherships-in-Training—Norah O'Kelly, Kathleen Quigly, and James Sator (awarded).

Art Scholarships—Margaret Crilley, Kathleen Fox, James Golden and Gladys Scott (renewed), and Ernest Lakeman (Stained Glass) awarded.

Silversmiths' (Apprentice) Scholarships—Ralph Anderson and Michael Dunne (awarded), Wm. Phelan and Wm. Bodden (renewed).

Fifteen Silversmiths' Apprentices attended the school for instruction in drawing and design as applied to their trade, whose progress was highly satisfactory.



FIVE BRANCHMISTRESS TRUST SCHOLARSHIPS held at this School for instruction of the holders in drawing and design as applied to lace and crochet work were awarded to Miss Olive Cox for crochet, and to Miss Lizzie Conlon for lace. Miss Cox was awarded a certificate marked "First Class (Excellent)" for Crochet work in the Summer Course Examination held at Cork last July.

§ The Students of the Design Classes executed many designs for Christmas stamps, calendars, and book illustrations for Her Excellency the Countess of Aherdeen, to be used in connection with the work of the Women's National Health Association. The students also supplied many designs for lace to the various lace-making centres, and illuminated work for Altar Charts of Churches.

Professor W. Beresford Pite, F.R.I.B.A., gave three lectures on ARCHITECTURAL EDUCATION in the lecture theatre of the Royal College of Science to the Students of the Metropolitan School of Art, and to the Art Teachers attending the Summer Courses of Instruction, in July last. These lectures were extremely interesting and valuable from an educational point of view and were highly appreciated.

LANDSCAPE CLASSES were conducted during the month of July, when the students made many interesting sketches and studies of outdoor nature in the neighbourhood of Dublin. The Classes were conducted by Mr. George Lynce, the number of students being eighteen.

THE SUMMER COURSE of Art Instruction for Teachers of Secondary Schools was held during the month of July, and was attended by ninety-four teachers.

The Classes were under the supervision of the Head Master, assisted by Mr. Luke, Mr. Sheppard, Mr. Orpen, Mrs. Borden, Miss Jacob, Miss Emerson, Miss E. Luke, Miss Fox, Miss Crilly, Mr. Golden, and Mr. Power. The progress of the teachers attending this course was highly satisfactory, as judged by the marked improvement seen in their work at the end of the Course. The remarkable number of studies executed, and the great industry shown by these students, testified not only to the value of the work, but showed how grateful the students were for the advantages afforded to them by the Department.

The Department's Art Inspector, Mr. Patrick O'Sullivan, A.R.C.A. (Lond.), held an examination in the subjects of Elementary Modelling and Blackboard Drawing for the teachers attending the Summer Course.

At the ART INDUSTRIES EXHIBITION of the Royal Dublin Society thirty-four prizes were obtained by the students of the School. These included twenty-two for designs for Lace, Crochet and Embroidery, three for Repousse work, two for Enamelling, four for Stained Glass, and one each for Illuminating, Leatherwork, and Modelling.

The high standard of work and design in Enamelling and Metalwork which the Metropolitan School of Art is noted for, not only in Great Britain and Ireland but on the Continent, has been well maintained during the past year, and the demand for the loan of students' works for exhibition, especially from the educational authorities of the Continent and the British Colonies, is so great that it has become difficult at times to make arrangements. Our Metal and Enamel works have also been the subject of various illustrated articles in some of the Continental Trade Journals, among which was a very appreciative and flattering notice in the "Deutsche Goldschmiede Zeitung" (German Goldsmiths' Journal), published at Leipzig, in August last.

I regret to say that the new accommodation for the Enamelling, Metalwork, and Modelling Classes, which we hoped to have had last year, has not yet been given to us, but I trust that we may have it by this time next year.

An interesting retrospective Exhibition of the past and present students' works in painting, sculpture and the applied arts was held in Dawson Street during the month of January last. This Exhibition was much appreciated by the Dublin public. I may add that it was self-supporting, and was successful in every way.

The Annual Exhibition of Students' works was held during the Christmas vacation, and was well attended by the public.

I have to thank Mr. Luke and all the members of the teaching staff, and also Mr. Tilly, the Registrar, for their able and willing assistance given to me at all times, which has largely contributed to the efficient and satisfactory position which the School continues to hold.

(Signed),

JAMES WARD, A.R.C.A. (Lond.),

Head Master.

# SUMMARY OF THE DEPARTMENT'S ACTION IN CONNECTION WITH COMPLAINTS AS TO RATES CHARGED BY CARRYING COMPANIES FOR THE CONVEYANCE OF MERCHANDISE

Complaints received during the period 1st July, 1909, to 30th June, 1910.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 2nd and 7th July, 1909.—That charges amounting to £1 19s. had been made for the conveyance from Newry to London of a consignment of 18 cases of eggs weighing 10 cwt. 0 qrs. 14 lbs.

It appeared that the traffic was handed to the Great Northern Railway Co. at Newry consigned via Belfast. There being no through rates in force for the conveyance of goods from Newry to stations in England via Belfast the consignment was charged for at the rate of 17s. per ton Newry to Belfast, and at the through rate of 69s. per ton Belfast to London. The Great Northern Railway Company stated that they had proposed to the other Companies concerned the question of fixing through rates from Newry to stations in England via Belfast, but that the proposal had not been agreed to.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 2nd and 7th July, 1909:—

- (1) That the rate of 58s. 4d. per ton at Owner's Risk for the conveyance of eggs from Dungarvan to London was excessive.
- (2) That a rate at Owner's Risk was not in force for the conveyance of eggs from Ballycullane to London.
- (1) The Great Southern and Western Railway Company were not prepared to reduce the rate, which they considered was a reasonable one.
- (2) The Department communicated with the Great Southern and Western Railway Company in the matter. A rate of 50s. 5d. per ton for the conveyance of eggs in boxes, cases or crates at Owner's Risk from Ballycullane to London was fixed. The rate previously in force was the class 3 rate—68s. 1d. per ton.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 6th July, 1909.—That the charge—£2 6s. 3d.—made for the conveyance of a bull calf by passenger train from Dublin to Cork was excessive.

It appeared that the part truck rate was charged instead of the head rate. A refund of £1 15s. 9d. was made.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 6th July, 1909.—That the charges for the conveyance of live poultry by passenger train service from Rathilly to Waddon, Sussex, were excessive.

The Owner's Risk rate for the traffic was reduced from 7s. to 6s. 9d. per cwt., minimum 1 cwt.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 8th July, 1909.—That a charge of £1 13s. 4d. had been made in respect of the conveyance of 4 boxes of live lobsters from Fenit to London.

It appeared that the weight on which the charge was based was incorrect, and that the proper charge should have been 17s. 6d. Complaintant was informed that a refund would be made.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 30th July, 1909.—That the charges of £1 4s. 11d. for the carriage of 3 boxes of lobsters from Kells (Co. Kerry) to London, and of 17s. 5d. for the carriage of 2 boxes of lobsters from Kells to Bristol were excessive.

The charges were based on a rate of 5s. 10d. per cwt., Owner's Risk. The rates for the conveyance of lobsters from Kells to London and to Bristol were reduced from 5s. 10d. to 5s. per cwt. (Owner's Risk) in each case. Complainants were informed that refunds would be made in respect of the consignments which had gone forward at the higher rates.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.,** 20th August, 1909.—That charges amounting to 18s. had been made for the carriage of a sow and 10 bonhams from Lismore to Kilmallock.

The charges were in accordance with the scale in force for the carriage of such traffic by passenger train.

**MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES,** 28th August, 1909.—That the Owner's Risk rate—58s. 2d. per ton—for the conveyance of eggs from Meam Cross to Manchester was excessive. (Complainant suggested that a rate of 45s. per ton should be fixed for the traffic.) The Department brought the suggestion before the Midland Great Western Company. The Company were not prepared to put the suggested rate in operation.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.,** 1st September, 1909.—That a charge of 8s. 4d. had been made for the conveyance of a consignment of salt weighing 3 cwt. from Limerick to Kilmorna.

It appeared that the salt was sent by passenger train, as it was required in a hurry to replace a previous consignment which had been damaged in transit. The Company, in the circumstances, reduced the charge to the amount which would have been payable if the salt had been sent by goods train, and refunded a sum of 8s. 2d.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.,** 13th September, 1909.—That the rates for the conveyance to Cork of crab apples in bags from Caher, from Clonmel and from Tipperary, viz.: 14s. 8d., 16s. 8d. and 12s. 8d. per ton, respectively, were excessive.

The Department were informed by the Great Southern and Western Railway Company that any application from the complainants with a view to having reduced rates fixed for the 1910 season would receive the favourable consideration of the Company. The rates were reduced in September, 1910, to 11s. 6d., 13s., and 10s. 2d., respectively—the reduced rates to apply until the end of the year.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.,** 17th and 21st September, 1909.—That while a rate of 29s. 8d. per ton was charged for the conveyance of fruit (grapes) by goods train from Dublin to Limerick, the rate from Liverpool to Limerick via Holyhead and Dublin was only 18s. 4d. per ton.

A rate of 25s. per ton station to station, to remain in force until 31st December, 1910, was fixed for the carriage of grapes (in casks or cases) (also bananas, lemons, melons and oranges) from Dublin to Limerick.

(It appeared that the rate for the conveyance of grapes from Liverpool to Limerick via Dublin was 26s. 8d. per ton, the rate of 18s. 4d. per ton applying to consignments sent by direct steamer).

**GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES,** 24th September, 1909, and 1st November, 1909.—That the rates for the conveyance of live poultry from Newmarket, Co. Cork, to Barry Dock, Cardiff, Newport (Monmouth) and Brynmawr were excessive.

Rates of 6s. 8d. per cwt., Company's Risk, and 5s. per cwt., Owner's Risk, were fixed to Barry Dock. The former rates were 9s. 4d. per cwt. C.R. and 5s. 10d. per cwt. O.R.

The Companies were not prepared to make any alteration in the rates to Cardiff and Newport.

The question of a reduction in the rate to Brynmawr is under consideration.

**GREAT NORTHERN RAILWAY CO. (IRELAND), AND OTHER COMPANIES,** 1st October, 1909.—That the rate—48s. 8d. per ton—charged for the conveyance of apples from Annaghmore to London was excessive.

The Department communicated with the interested Companies in the matter. A rate of 37s. 6d. per ton, including delivery in London, was put in operation for the traffic during the 1910 season.

MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE) AND GREAT NORTHERN RAILWAY CO. (IRELAND), 4th October, 1909.—That a sum of £2 1s. 6d. was charged for the conveyance of ten runs from Ballymena to Ballyronney.

It appeared that the runs were sent from Parkmore, not from Ballymena, and that the charges were made up as follows:—

	s.	d.
Parkmore to Ballymena	8	9
Transfer at Ballymena	1	0
Ballymena to Antrim	6	6
Antrim to Ballyronney	25	3
	41	6

The Department communicated with the Great Northern Railway Company in the matter. The Company stated that the runs were conveyed from Parkmore to Antrim by goods trains, but had to be forwarded from Antrim by passenger train in order to reach destination same day. The Company made a refund of 5s. 5d.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LANCASHIRE AND YORKSHIRE RAILWAY CO., AND LONDON AND NORTH WESTERN RAILWAY CO., 18th October, 1909.—That the through rate (38s. 6d. per ton) for the conveyance of litter from Kilkenny to Preston exceeded the sum of the local rates, Kilkenny to Liverpool (19s. 5d. per ton), and Liverpool to Preston (10s. per ton).

The Department brought under the notice of the Companies the question of a reduction in the through rate. The Great Southern and Western Company stated that the matter had been considered by the Companies concerned, and that no reduction could be made in the existing rate.

The Company also stated that the rates between Kilkenny and Liverpool were brought very low at a time of severe competition between Irish Railway Companies and cross-Channel Steamship Companies, and could not be accepted as a basis for reductions in rates between interior Irish and interior English stations.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO.; AND MIDLAND RAILWAY COMPANY OF ENGLAND, 28th October, 1909.—That the rate—47s. 6d. per ton—for the conveyance of apples from Ballycar to London was excessive.

The Department communicated with the Companies concerned. An exceptional rate of 40s. per ton, Owner's Risk, was agreed to as an experiment, to remain in force till 31st December, 1910.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 30th October, 1909.—That a rate of 12s. 2d. per ton was charged for the conveyance of galvannead iron from Limerick to Balla.

The Company stated that the rate in question was on the same basis as the rates for the traffic from North Wall, Belfast, and other stations, and that they were not prepared to reduce it.

GREAT SOUTHERN AND WESTERN RAILWAY CO AND OTHER COMPANIES, 1st November, 1909.—That charges of 1s. 11d. and 8s. 3d. respectively were made for the conveyance of apples in boxes of 14 lbs. and 38 lbs. from Limerick to stations on lines running south of London.

The Department made inquiries in the matter. A rate of 6s. per cwt, Owner's Risk, was fixed for the traffic from Limerick to all stations on the railway lines running south of London—the minimum charge being as for 25 lbs.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 2nd November, 1909.—That no through rates were in operation for the convey-

ance of cattle from Newcastle West to Peterboro' and other Midland towns in England, and from Tipperary to places in England via Dublin.

The Department brought the matter under the notice of the Great Southern and Western Railway Company. The Company stated that they had had no complaint from any trader as to the abatement of through rates, and that they did not think that any real necessity existed for putting through live stock rates into operation. The matter is receiving attention.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES, 3rd November, 1909:—

- (1) That a sum of 2s. 4d. was charged for the conveyance of a box of butter weighing 2 qr. 7 lbs. from Boyle to London.
- (2) That while the rate for the conveyance of butter from Charleville (129 miles from Dublin) to London was 40s. per ton, the rate from Boyle (306 miles from Dublin) was 52s. 6d. per ton.
- (1) The charge appeared to be such as the Companies might make.
- (2) Rates of 48s. 4d. per ton via Dublin and 48s. 4d. per ton via Sligo, carted in England, were fixed for the conveyance of butter from Boyle to London.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 3rd November, 1909.—That the charge for the conveyance of margarine from Limerick to London had been increased from 35s. per ton to 63s. per ton as from the 1st November, 1909.

The Department communicated with the Great Southern and Western Railway Company, and the rate was reduced to 35s. per ton as from the 1st January, 1910.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 5th November, 1909:—

- (1) That charges amounting to over 9s. per barrel had been made for the conveyance of fresh herrings from Kenmare to Roscommon.
- (2) That charges amounting to over 11s. 5d. per barrel had been made for the conveyance of 6 barrels of fresh herrings from Kenmare to Galway.
- (1) The Department understood that if any further fish traffic was likely to pass between Kenmare and Roscommon reduced rates might be arranged.
- (2) The consignment had been charged for in accordance with the Half Parcels Owner's Risk scale (4s. 8d. per cwt.). Rates of 3s. 3d. per cwt., Company's Risk, and 2s. 6d. per cwt., Owner's Risk, were arranged for the conveyance of fresh herrings from Kenmare to Galway. The rate of 2s. 6d. per cwt. was applied to the consignment, and a refund was made to the consignee.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 15th November, 1909.—That no notice of the arrival of a wagon of coal sent from North Wall to Monastererevan had been received by the consignee, and that a demurrage charge of 1s. had been made by the Company in respect of the wagon.

The Company stated that an advice note had been posted to consignee by the station master at Monastererevan, and that, in the circumstances, they could not forego the charge.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 19th November, 1909.—That the rates for the conveyance of grapes from Dublin to certain stations were excessive.

The matter was considered by the Irish Railway Managers, who did not, however, see their way to make any alteration in the classification of the traffic.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th November, 1909, and 10th December, 1909.—That the rates—9d. per cwt. for distances from 1 to 30 miles and 1s. per cwt. for distances from 30 to 50 miles—for the conveyance of curd for the manufacture of casoin to Tipperary were excessive.

The Department communicated with the Great Southern and Western Railway Company in the matter. The Company were not prepared to make any reduction in the existing rates.

DUBLIN AND SOUTH-EASTERN RAILWAY CO. AND LONDON AND NORTH-WESTERN RAILWAY CO., 26th November, 1909.—That while the rate for the conveyance of dead poultry at Owner's Risk from Enniscorthy, Wexford, and New Ross via Dublin and Holyhead to London was 4s. 6d. per cwt., the rate from Rathfriland was 5s. per cwt.

The Department communicated with the carrying companies concerned. The companies stated that they were not prepared to reduce the rate. The matter is receiving attention.

GRAY SOUTHERN AND WESTERN RAILWAY CO. AND LONDON AND NORTH-WESTERN RAILWAY CO., 25th November, 1909.—That the rates (55s. 6d. per ton, Company's Risk, and 60s. per ton, Owner's Risk), charged for the conveyance of eggs from Rathfriland to St. Helena and Southampton were excessive.

Rates of 56s. per ton, Company's Risk, and 60s. per ton, Owner's Risk, were fixed for the traffic to St. Helena.

The Companies were not prepared to reduce the rates from Rathfriland to Southampton.

GRAY SOUTHERN AND WESTERN RAILWAY CO., 1st December, 1909.—That the rate—55s. per ton—for the conveyance of tea from London to Killybegs was excessive.

Complainant was informed that it was open to him to make a complaint in the matter to the Board of Trade under Section 31 of the Railway and Canal Traffic Act, 1888.

GRAY NORTHERN RAILWAY CO. (IRELAND); DUNDALK, NEWRY AND GREENGLASS RAILWAY CO., AND LONDON AND NORTH WESTERN RAILWAY CO., 2nd December, 1909.—

- (1) That 13s. 2d. was charged for the conveyance of a consignment of returned empty fish boxes—weighing 1 ton—from Greenacres to Ballinaggon via Greenore.
- (2) That 21 15s. 6d. was charged for the conveyance of 120 empty barrels from Manchester to Greenacres.
- (3) The Great Northern Company issued instructions for a refund of 2s. 2d. The charges remaining after this refund, viz. 1 11s., appeared to be those for new empty boxes and not returned empties. The Department brought the matter under the notice of the Great Northern Company, who asked to be furnished with the data on which the boxes were sent with fish from Ballinaggon to Greenacres. This information was not supplied by complainant.
- (2) It appeared that the charges were correctly calculated, the empties being new apple barrels.

CORK, RANDON AND SOUTH COAST RAILWAY CO., 4th December, 1909.—That the Company had increased the charges for the carriage of fish owing to the weight of boxes of fish being regarded as 1½ cwt. instead of 1 cwt. as formerly.

The Department made inquiry in the matter. It appeared that the increased charges only applied to herrings sent from Bantry, and were necessitated by an increase in the weight of the consignments, due to the use of heavier boxes and the employment of a closer method of packing.

GRAY SOUTHERN AND WESTERN RAILWAY CO., 4th December, 1909.—That a charge of 10s. had been made for the conveyance of 2 boxes of roker—1 cwt. each—and charges of 14s. 6d. for the conveyance of consignments of 3 boxes of 1 cwt. each from Cobh to London.

The Department understood that a refund was made. Particulars have not so far come to hand.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH-WESTERN RAILWAY CO., AND MIDLAND RAILWAY CO. OF ENGLAND, 11th December, 1909.—That the rate—40s. per ton—for the conveyance of crab-apples from Tipperary to Grimsby was excessive.

The Companies concerned were communicated with, but were not prepared to reduce the rate.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND OTHER COMPANIES, 5th January, 1910.—That a charge of 17s. 8d. had been made for the conveyance of a consignment of fruit weighing 6 cwt. 0 qr. 14 lbs. net., sent from Annaghmore to London in December, 1909.

It appeared that the consignment weighed 7 cwt. 2 qrs., and that the charge was based on a rate of 40s. 8d. per ton. This rate was, however, reduced to 37s. 6d. per ton for the 1910 season. The difference between the charge made and that which would have applied at the new rate was refunded to consignor.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND GREAT NORTHERN RAILWAY CO. (IRELAND), 18th and 13th January, 1910.—That the charges varying from 2s. 4d. to 6s. 4d. per head made for the conveyance of certain Turkey Cockerels (intended for stock purposes) from Tallamore to Dundalk, Portadown, Droghda and Milford (Co. Armagh), were excessive.

The Department brought the matter under the notice of the Great Southern and Western Company. It appeared that the charges varied from 2s. 4d. to 3s. 8d., and that no charge of 6s. 4d. had been made. It appeared that the charges were based on the existing rates.

GREAT NORTHERN RAILWAY CO. (IRELAND) AND DUBLIN AND SOUTH-EASTERN RAILWAY CO., 18th January, 1910.—That the charge—5s. 8d.—for the conveyance of a deal press from Lonsdale to Stillorgan was excessive.

The charge appeared to be such as the Companies were entitled to make.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 21st January, 1910.—That the rates—46s. 8d. per ton in each case—for the conveyance of eggs from Geat and from Tubber to Liverpool were excessive.

The Department communicated with the Great Southern and Western Railway Company in the matter. The Company stated that no reduction could be made in the rates.

G. & J. BURNS, LTD., AND GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th January, 1910, and 8th February, 1910.—That the charges for the conveyance of a consignment of seed potatoes from Dumries to Bridgetown were excessive.

The Department had inquiry made in the matter, and it appeared that the charges were such as the Companies were entitled to make.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND DUBLIN AND SOUTH-EASTERN RAILWAY CO., 27th January, 1910.—That the rate—31s. 2d. per ton—for the conveyance of eggs from Tipperary to Kingstown was excessive.

The Department communicated with the Great Southern and Western Railway Company in the matter. The rate was reduced to 28s. 4d. per ton. Owner's Risk, station to station, to apply until the 31st March, 1911.

MIDLAND RAILWAY (NORTHERN COUNTRIES COMMITTEE), 4th February, 1910.—That a charge of 3s. 2d. had been made for the conveyance of a consignment of salt herrings, weighing 6 cwt. 1 qr., from Belfast to Toome.

The charge was such as the Company were entitled to make, being calculated on the rate (class 1) for salt fish from Belfast to Toome, viz. 10s. 1d. per ton, including cartage in Belfast.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 7th February, 1910.—That the rate—11d. per gallon—for the carriage of new-milk from Kilmaleck to Dublin was excessive.

The Department communicated with the Great Southern and Western Railway Company in the matter, but the Company did not see their way to reduce the rate.

NAVAL GOVERNMENT RAILWAY Co., 21st February, 1910.—That £26 was charged for the conveyance from Durban to Bloemfontein of a consignment of potatoes weighing 6 tons 12 cwt. 3 qrs. sent from Truies.

It appeared that it had not been possible to trace the particular consignment, but that the charge for 6 tons 12 cwt. 3 qrs. of potatoes from Durban to Bloemfontein should be about £34 13s. 10d.

NORTH STAFFORDSHIRE RAILWAY Co., 26th February, 1910.—That through rates for the conveyance of butter from Lamerick to stations on the North Staffordshire Railway had not been fixed.

The matter is still the subject of correspondence between the Department and the North Staffordshire Railway Company.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 1st March, 1910.—That excessive charges were made for the conveyance of certain consignments of butter sent from Abbeyfeale to Windermere.

It appeared on inquiry that owing to an error certain consignments of butter sent from Abbeyfeale to Windermere had been charged for at a rate of 8s. 10d. per cwt., instead of at the rate 4d. per lb., or 4s. 8d. per cwt. Complainants informed the Department that a refund of £1 2s. 10d. had been made.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 10th March, 1910.—That the rates for the carriage of poultry and eggs from Rathkeale to certain places in Great Britain included charge for collection and delivery—services which were not performed.

It appeared on inquiry that the rates for the conveyance of poultry (passenger train service) from Rathkeale did not include charges for cartage at Rathkeale, and that the rates for the conveyance of eggs to two of the places mentioned by the complainants (Liverpool and Glasgow) were station to station rates. The Department communicated with the Company as regards the rates for the conveyance of eggs to London, Birmingham, Bradford, Bristol, Cardiff, Leeds, Leicester, Manchester, Nottingham, Sheffield and Southport. The Company stated that these rates did not include charges for cartage at Rathkeale. The complainants were informed accordingly.

LANCASHIRE AND YORKSHIRE RAILWAY Co., 10th March, 1910.—That a charge of 14s. 8d. had been made for the conveyance of 7 dead pigs and 1 barrel from Drogheda to Manchester.

It was found on inquiry that while the consignment had been forwarded from Liverpool to Manchester by passenger train, the charge made—11s. 8d.—had been calculated at the through rate of 26s. 8d. per ton, which was the rate for cartage by goods train service only.

GREAT NORTHERN RAILWAY Co. (IRELAND) AND OTHER COMPANIES, 11th March, 1910.—That refunds should be made on the charges for the cartage, during the years 1907, 1908, and 1909, of coal intended by the Complainants for manufacturing purposes, from Belfast, Newry and Drogheda to Ballyhoose, and of butter sent by the Complainants to Dublin, Belfast, London, Birmingham, Manchester and Glasgow from Ballyhoose.

It appeared on inquiry that the rates for the conveyance of coal were station to station rates, in respect of which refunds could not be made.

The butter rates to Dublin, Belfast, Liverpool and Glasgow were station to station rates.

It was suggested that complainants should communicate with the Great Northern Company in regard to the charges made for the conveyance of butter to Birmingham, London and Manchester.

GREAT NORTHERN RAILWAY Co. (IRELAND) AND GREAT SOUTHERN AND WESTERN RAILWAY Co., 19th March, 1910.—That while a rate of 27s. 6d. per ton was in force for the conveyance of apples from Richhill to



Limerick, a charge of 33s. per ton was being made for the same service from Portadown.

The Department communicated with the Railway Companies concerned, and the rate from Portadown was reduced to 27s. 6d. per ton—the reduced rate to remain in force till the end of 1910.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND LONDON AND NORTH-WESTERN RAILWAY CO., 21st March, 1910, and 4th May, 1910.—That the rates for the conveyance of eggs from Castleroa to London were in excess of the rates for the conveyance of eggs to London from France, Russia, Denmark and Italy.

The Department are having investigations and comparisons made regarding the rates.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND GREAT SOUTHERN AND WESTERN RAILWAY CO., 14th April, 1910.—That the rates for the conveyance of mackerel and herrings from Clifden to towns in counties Tipperary and Limerick were excessive.

Reduced rates were arranged from Clifden to the following stations in counties Tipperary and Limerick.—Cashel, Cashel, Chinnel, Dundinn, Emly, Fethard, Laffan's Bridge, Nenagh, Roscrea, Templemore, Thuries Tipperary, Abbeyfeale, Adare, Croom, Kilmallock, Newcastle West and Rathkeale.

COOK, BANGOR AND SOUTH-COAST RAILWAY CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO., AND MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 18th April, 1910.—That a charge of 12s. 11d. had been made for the conveyance from Baltimore, Co. Cork, to Clifden, Co. Galway, of 3 boxes of fishing nets weighing 4 cwt. 2 qrs.

It appeared that there was no through rate from Baltimore to Clifden. The Department were informed that the charge would be adjusted to that which would have applied had a through rate (52s. 11d. per ton) been in force.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 9th May, 1910, and 18th June, 1910.—That through rates were not in operation for the conveyance of butter from Ballyhale to Preston, Blackburn and Blackpool.

The Department brought the matter under the notice of the Great Southern and Western Railway Company. A through rate of 38s. 4d. per ton, carried, was fixed for the conveyance of butter between Ballyhale and Preston. This rate was, however, higher than the sum of the bookings Ballyhale to Liverpool, and Liverpool to Preston, viz.: 32s. 3d. per ton. The matter is receiving attention.

The question of through rates between Ballyhale and Blackburn and Blackpool is pending.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 10th and 13th May, 1910.—That the Company refused to run special trains for the conveyance of cattle at charges less than those which applied to ten waggons.

The Department communicated with the Company in the matter. The Company stated that they had no fixed rule as to the number of waggons of stock for which they provided special trains, but that when they consider it reasonable to run such trains they usually looked for twelve waggons in the case of short distance traffic and ten waggons for long distance traffic. The Company were not prepared to alter their existing arrangements, and Complainants were informed accordingly.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND GREAT WESTERN RAILWAY CO., 21st May, 1910.—That the rates—3½d. per gal., Company's Risk, and 2½d. per gal., Owner's Risk, min. as for 12 gals.—for the conveyance of milk from Newmarket, Co. Cork, to Pontypidd, Cardiff and Newport were excessive, especially in the case of separated milk.

The Department communicated with the Great Southern and Western Railway Company in the matter. The Company stated that they con-

sidered the figures in operation reasonable when the distance and the transfer at the ports were taken into account, and that they were not prepared to reduce them.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 23rd May, 1910.—That the amount—£3 17s. 11d.—charged for the conveyance of a bull from Dublin to Trillick was excessive.

It appeared on inquiry that the charge was based on the part truck rate, but that the animal had been consigned at head rate. The charge was reduced to the head rate, and a sum of £2 2s. was refunded.

GREAT NORTH OF SCOTLAND RAILWAY CO.; CALLEDONIAN RAILWAY CO.; CLYDE SHIPPING CO., AND GREAT SOUTHERN AND WESTERN RAILWAY CO., 24th May, 1910.—That charges, amounting to £7 14s. 9d., had been made for the conveyance of a bull from Lady'sbridge Station (Great North of Scotland Railway) to Castletownroche, Co. Cork.

It appeared that owing to the size of the animal the use of two stalls in a horse-box was requisite, the rate on the Scottish lines for such accommodation being the single horse rate and a-half plus 25 per cent. The rail charges in Scotland were calculated on this scale. A sum of 8s. was refunded in respect of the charge between Cork and Castletownroche.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 3rd June, 1910.—That the charge—12s. 3d.—made for the conveyance of seven 56-lb. pyramid boxes of butter from Templemore to Nottingham via Dublin and Liverpool was excessive.

The Department brought the matter under the notice of the Great Southern and Western Railway Company, and the rate for the carriage of butter from Templemore to Nottingham was reduced from 57s. 6d. per ton to 32s. 6d. per ton.

LONDON AND NORTH-WESTERN RAILWAY CO. AND MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 10th June, 1910.—That a sum of £1 14s. 4d. was charged for the conveyance of a consignment of young trees, valued at £1 5s., from London to Athenry.

It appeared on inquiry that an overcharge of 15s. 4d. had been made. This amount was refunded.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 14th June, 1910.—That the charge for the conveyance of a bull from Forfarlington to Rathmore, Co. Kerry, was excessive.

The Department had inquiry made in the matter. It appeared that the part truck rate instead of the head rate had been charged. A refund was made.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th June, 1910.—That the charge, £6 6s. 10d., for the conveyance of a bull from Dublin to Cahirciveen was excessive.

The Department brought the matter under the notice of the Company. It appeared that the animal was conveyed in a horse box, but that such a service had not been ordered by consignor. The charge was reduced to the head rate, and a refund of £4 6s. 6d. was made.

**SUMMARY OF INQUIRIES MADE BY THE DEPARTMENT IN  
REGARD TO COMPLAINTS RECEIVED RESPECTING DELAYS  
IN THE CONVEYANCE OF MERCHANDISE BY CARRYING  
COMPANIES AND DAMAGE TO CONSIGNMENTS  
DURING TRANSIT.**

Complaints received during the period 1st July, 1908, to 30th June, 1909.

**CORK, BANDOON & SOUTH COAST RAILWAY Co.; CITY OF CORK STEAM PACKERS Co.; LONDON AND NORTH WESTERN RAILWAY Co.,** 5th July, 1909.—That 1,100 eggs were damaged in 16 4hd. cases of eggs—portion of a consignment of 17 cases—which were forwarded at Company's risk on the 17th June from Skibbereen to London.

The Department communicated in the matter with the Companies, and were subsequently informed by complainants that their claim of £4 19s. in regard to the consignment had been met.

**GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON & NORTH WESTERN RAILWAY Co.,** 5th July, 1909.—That 300 eggs were broken in four 4hd. cases of eggs—portion of a consignment of 30 cases—forwarded on the 19th June, from Tralee to London.

The Department communicated with the Great Southern & Western Railway Co. in the matter. The complainants subsequently stated that their claim for the damage had been met in full, and that they had noticed a distinct improvement in the handling of eggs sent by the consignee in this case.

**COUNTY DONEGAL RAILWAYS JOINT COMMITTEE AND OTHER COMPANIES,** 13th July, 1909, 18th August, 1909.—That eggs were broken in three consignments sent from Donegal to Hackburn.

The Department communicated with the Co. Donegal Railways Joint Committee, who stated that they had no trace of one consignment, and that the other consignments passed through the different carriers' hands without remark.

**GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.,** 15th July, 1909.—That a proposal made by complainant to the Companies for the use of large crates to hold baskets of fruit, and so to obviate too much handling and consequent damage between Carrick-on-Suir and Holyhead had not been favourably considered.

The Department were informed by the London and North Western Railway Company that the Company's Waterford agent had interviewed the complainant, who did not intend to take further action in the matter.

**MIDLAND GREAT WESTERN RAILWAY OF IRELAND Co.; LONDON AND NORTH WESTERN RAILWAY Co.,**—(1) 16th July 1909; (2) 15th September, 1909. (1). That eggs sent from the Carrick-on-Shannon district to St. Helen's, Lancashire, were damaged in transit, almost every case received during the week ended the 3rd July, containing from 28 to 33 broken eggs. (2). That 16 4hd. cases of eggs forwarded on the 9th September from Carrick-on-Shannon to St. Helen's, Lancashire, reached their destination on the 13th September with most of the cases leaking.

(1) and (2). Arrangements were made by the London and North Western Railway Co. to have consignments of eggs forwarded from Carrick-on-Shannon to consignees specially watched. The Inspector detailed for the duty was of opinion that the cases used by the consignors were not constructed of material sufficiently strong to bear the strain of transit. An Inspector of the Department called on consignors, who undertook to have certain defects in the cases remedied.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. AND OTHER COMPANIES.—20th July, 1909.—(1) That two cases of eggs forwarded on the 6th February, from Longford to Higher Broughton Railway Station, Harwich, were sent to Harwich. (2) That a case of eggs sent on the 27th February from Longford to Manchester was not delivered. (3) That a box of dead poultry forwarded on the 13th April from Longford to a firm in Rathmines, Dublin, was not delivered to consignees. (4) That the Midland Great Western Company failed to give consignees proof of the delivery of four cases of eggs forwarded on the 17th February, and four cases on the 18th February, from Longford to Bolton. (5) That the returned empty fowl crates and egg cases sent to complainants were not delivered in some instances.

(1) The Midland Great Western Co. stated that the destination was not plainly written on the consignment note, that the eggs were consequently mis-sent to Harwich, and that when the error was discovered the consignment was immediately re-entered to Harwich. (2) The Midland Great Western Co. stated that the case was delivered on the 8th March. (3) The Midland Great Western Company stated that the consignment was forwarded on the 12th April, and was delivered on that date, consignees giving a clear receipt. (4) The Midland Great Western Co. stated that they could find no trace of any letters on the subject from the complainant. (5) The Midland Great Western Co. stated that if particulars were furnished inquiry would be made in the matter.

Complainant was informed by an Inspector of the Department of the result of the Department's inquiries. Complainant stated that he was then unable to produce documentary proof in support of his complaints.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO., CO. DONEGAL RAILWAYS JOINT COMMITTEE, 21st July, 1909; 17th August, 1909.—(1) That no facilities were afforded by the Railway Co. for icing at Burton Port consignments of salmon sent from that station. (2) That consignments of salmon sent from stations in Donegal were not iced at the places of despatch.

The Department brought before the respective Companies the question of providing facilities for icing at the forwarding stations, salmon sent from stations on their lines to Londonderry.

The Londonderry and Lough Swilly Co. stated that they proposed to construct two large hogg wagons so that the icing could be done en route to Londonderry.

The Committee stated that they could not see their way to incur the expense of providing the ice, crubbers, etc., necessary for icing at the forwarding stations, as the consignments were small in quantity and were also infrequent and uncertain.

DUBLIN AND SOUTH EASTERN RAILWAY CO., 24th July, 1909.—(1) That packages of salmon and dead chickens were placed on top of crates of live poultry at New Ross Station on the 24th July. (2) That although the crates used by complainant for the conveyance of salmon were supplied with rope handles to obviate upending, the handles were not used by the Co.'s servants.

(1) The Co. stated that there were six packages of fish and dead poultry forwarded from New Ross Station by complainant on the date mentioned, that there was room for only three of them in the passenger van, and that the remaining three were placed in one end of a "perahable" van at the other end of which were three crates of live fowl. (2) The Department brought the matter under the notice of the Dublin and South Eastern Railway Co. The Co. stated that every care was taken in the handling of consignments, and that the rope handles were always used when available.

GRANT SOUTHERN AND WESTERN RAILWAY CO.; GREAT WESTERN RAILWAY CO., 29th July, 1909.—That a consignment of honey forwarded about the middle of July from Limerick to London was damaged in transit.

The Department communicated with the Companies who stated that the honey was signed for on delivery without remark.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 30th July, 1909, 4th August, 1909.—That five half-cases of eggs forwarded from Boyle to Preston were badly damaged in transit.

The London and North Western Co. stated that three of the cases were accidentally damaged when being shipped at North Wall, Dublin. The consignment was forwarded at Owner's Risk, and a claim made in the matter was declined.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 7th August, 1909.—That ten cases of eggs forwarded on the 28th June, from Bankeer via London and North Western Co.'s route to Liverpool were badly damaged in transit.

It appeared that a sum of £6 was offered in settlement of the claim made in the matter, but that the consignor was not prepared to accept less than £8.

GREAT NORTHERN RAILWAY CO. (IRELAND); GREAT SOUTHERN AND WESTERN RAILWAY CO., 11th August, 1909.—That eight boxes of butter forwarded on the 29th July, from Dungannon to Cork were not delivered until the evening of the 2nd August.

The Great Northern Co. stated that the consignment was handed to them at Dungannon at 5.30 p.m. on the 29th July, and was despatched by goods train the same evening, arriving in Dublin on the following night. Next day the boxes were handed to the Great Southern and Western Co. for conveyance to Cork. The 1st August was a Sunday. The Co. also stated that had the consignment been handed to them in time for conveyance by the 3.30 p.m. train from Dungannon on the 29th July, it would have reached Dublin early on the following morning.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; CITY OF DUBLIN STEAM PACKET CO., 11th August, 1909.—That two cases of eggs—portion of a consignment of seven cases—forwarded on the 7th August from Drumsna to Liverpool were badly damaged in transit.

Inquiries made by the Companies showed that nothing was noticed amiss with the consignment at Liverpool.

GREAT NORTHERN RAILWAY CO. (IRELAND); LONDON AND NORTH WESTERN RAILWAY CO., 11th August, 1909.—That three cases of eggs forwarded from Omagh to Liverpool were on reaching their destination on the 11th August found to be in a badly damaged condition.

The London and North Western Co. informed the Department that the matter had been arranged to consignee's satisfaction, and that the attention of their local staff had been called to the necessity of careful dealing with the egg traffic.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., CITY OF DUBLIN STEAM PACKET CO., 11th August, 1909.—That a consignment of eggs forwarded from Ballina to Liverpool and delivered on the 7th August was badly damaged in transit.

The claim made in respect of the consignment was met.

CITY OF CORK STEAM PACKET CO., 12th August, 1909.—(1) That crates of live fowl forwarded about the middle of July from Cork per ss. "Kensmore" were placed along the railings on deck, and that 45 geese and 19 ducks in the consignment were drowned during transit. (2) That the crates of live fowl arriving early on Sunday at Liverpool from Cork were delayed in delivery, in some instances delivery not being effected until Tuesday.

(1). The Company stated that the steamer did not ship any water during the voyage, and they expressed the opinion that, in the case of the fowl said to have been drowned during transit, the mortality was due to overcrowding in the crates. (2). The Co. stated that "the consignees cart their own traffic and invariably remove it after arrival on Sunday."

Complainant was informed of the Company's replies, and did not communicate further with the Department in the matter.

MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., AND OTHER COMPANIES, 16th, 26th, 28th August, 1909.—(1). That 1,200 eggs were smashed in transit in a consignment of 15 cases forwarded on the 5th August from Chiden to Manchester. (2). That 11 cases of eggs—portion of a consignment of 14 cases—sent from Maam Cross to Manchester were badly damaged in transit.

(1) and (2). The Department brought the complaints under the notice of the Midland Great Western Co. As regards the first consignment the Co. stated it was carted to an address in Manchester at which consignee was unknown, that it was carted to another address next day, and that delivery was refused. The Co. were of opinion that the carting in Manchester would have a detrimental effect on the eggs.

The Co. stated that the latter consignment was carted 7 miles over a rough road to Maam Cross Station, that it was conveyed at Owner's Risk rate, and that the Companies could admit no liability.

GREAT NORTHERN RAILWAY CO. (IRELAND), 30th August, 1909.—That the accommodation at Strabane Station for forwarding blackberries from the passenger platform was inadequate.

The Department's Superintending Transit Inspector was of opinion that reasonable facilities were afforded at the Station for the blackberry traffic per passenger trains, and the complainant was so informed.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LANCASHIRE AND YORKSHIRE RAILWAY CO., 31st August, 1909.—That a half case of eggs sent on 18th June from Tipperary to Blackburn was found on delivery to be badly lacking.

The Department brought the matter under the notice of the Lancashire and Yorkshire Company, and the claim made was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 1st September, 1909.—That a consignment of salt forwarded on 28th August from Limerick to Kilmorna was damaged in transit by fish brine.

A claim of 6s. in respect of the salt was met by the Co.

GREAT NORTHERN RAILWAY CO. (IRELAND), 3rd September, 1909.—That on the 30th July at Fintona Station cases of eggs were loaded for Londonderry in a wagon in which a quantity of hides had been placed.

The Company stated that the eggs were not conveyed to Londonderry in the same wagon as the hides.

Complainant was informed of the Co.'s reply.

LONDON AND NORTH WESTERN RAILWAY CO., 11th September, 1909.—That 3 butts and 3 boxes of butter forwarded to Liverpool from Fintona on the 3rd September and shipped at Greenore on that date had not reached their destination up to the 9th September.

The Company stated that the butter reached Liverpool on the 4th September without a waybill, and unaddressed, and that the consignees could not be traced until their full address was received on the 9th September. The Company informed the Department that a claim made in the matter had been disposed of to the satisfaction of complainant.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 11th September, 1909.—That a consignment of butter sent on the 7th September from Cork to Ballinrobe had not reached its destination up to the evening of the 10th September.

The Great Southern and Western Co. expressed regret that the consignment met with one day's delay in their hands owing to the late running of one of their goods trains which missed the connection.

GREAT NORTHERN RAILWAY CO. (IRELAND), 13th September, 1909.—That a box of butter sent on the 9th September from Randalstown Station for one of the Department's Surprise Butter Competitions was in a badly

damaged condition when delivered at Ball's Bridge, Dublin, on the 10th September.

The Department communicated with the Company in the matter, and a claim in respect of the loss sustained was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 22nd and 26th September, 1909.—(1) That butter was on delivery found to be missing from a box sent on the 16th September from Cork to Liphook, Hants. (2) That butter was on delivery found to be missing from a consignment sent on the 16th September from Cork to Malmesbury, Wilts. (3) That of two boxes of butter forwarded on the 10th September from Cork to Chilford, Gloucester, one box was not delivered to the consignee.

(1) The Great Southern and Western Company stated that they were unable to trace any consignments as having been sent on the 16th September to the consignee, but that a claim in regard to a box of butter sent on the 14th September had been met. (2) The Great Southern and Western Company stated that the consignment was delivered in apparently good condition and signed for on behalf of the consignee without remark, and that there was no evidence that pilferage occurred in transit. (3) A claim of £1 8s. in respect of the box of butter was paid.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON & NORTH WESTERN RAILWAY CO., 26th September, 1909.—(1) That 12 boxes of mackerel sent on the 16th September from Valentia Harbour to Liverpool arrived late at the Liverpool market, and were sold at a reduced price. (2) That 10 boxes of mackerel forwarded by the 8.20 a.m. train from Valentia Harbour on the 22nd September to Birmingham arrived late for the Birmingham market next day.

(1) The Great Southern and Western Co. stated that the consignment was handed to the London and North Western Co. on the 16th September. The London and North Western Co. stated that the boxes were shipped to Holyhead by the 7.30 p.m. boat on the 16th September, were forwarded from Holyhead by the 9.30 a.m. train on the 17th September, and were delivered at 8.5 a.m. on the 17th. (2) The Great Southern and Western Company stated that the consignment was handed to the London and North Western Company on the 22nd September. The London and North Western Company stated that the boxes were shipped to Holyhead by the 7.30 p.m. boat on the 22nd September, but that all the boxes were not sent forward from Holyhead together owing to the heavy quantity of fish (300 boxes) that had to be dealt with. Three of the boxes were, the Company stated, delivered about 8.10 a.m., and the other seven about 11.20 a.m. on the 23rd September.

The London and North Western Company stated that no avoidable delay occurred.

SLIGO STREAM NAVIGATION CO., LTD., 30th September, 1909, 7th October, 1909.—That a large number of eggs were broken during transit in a consignment of five cases forwarded on the 25th September from Belmullet to a firm in Sligo.

The Company stated that there was no sailing from Belmullet to Sligo between the 24th and 26th September, but that five cases forwarded to a firm in Sligo by complainant reached Sligo on the 24th, and were delivered in apparently good order on the following day.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 1st October, 1909.—That a consignment of pigs forwarded on the 28th December, 1908, from Athlery to Birmingham, did not reach Birmingham until 8.40 p.m. on the 29th December; that when delivery was effected on the following morning 13 of the pigs were found to be in bad condition; that the consignment missed the market, and that the Companies refused to meet a claim in respect of the loss sustained.

The London and North Western Company stated that the consignment got the first available service, that the pigs were apparently in good condition on arrival at Birmingham; no complaint having been made on

behalf of the consignee when delivery was effected; but that some days subsequently consignee complained that thirteen of the pigs were distressed. The Company also stated that the claim made in the matter was declined on the ground that there was no evidence of unreasonable delay or damage during transit.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 2nd October, 1909.—That on the delivery of a box of butter sent from Cork to Nasington, near Wansford, 3 lbs. of butter were found to be missing and the box to be in a damaged condition.

The Department communicated with the Carrying Companies in the matter, and a claim of 4s. 6d. in respect of the loss sustained was met.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; CITY OF CORK STEAM PACKET Co., 2nd and 7th October, 1909.—That 50 eggs were broken during transit in a case of eggs—portion of a consignment of 10 cases—forwarded on the 21st September from Tipperary to Liverpool.

The Great Southern and Western Company stated that the consignment was handed in good order by them to the City of Cork Steam Packet Co. The Steam Packet Company stated that it was in good order when delivered to consignees, and that a clear receipt was given. The Steam Packet Company also stated that consignees performed cartage at Liverpool, a distance of about  $1\frac{1}{2}$  miles.

GREAT SOUTHERN AND WESTERN RAILWAY Co., 6th October, 1909.—That one ton of fresh butter sent to Cork from Cappoquin, and one ton from Ballyduff were delayed in delivery.

The Company stated that the deliveries at the time were not so good as formerly owing to the employment of new hands consequent on a strike at Cork. The Company, however, hoped to have in a short time prompt deliveries effected at Cork.

LAIRN LINE, LTD., 9th October, 1909.—That in a 12 hhd. case of eggs forwarded on the 2nd October from Londonderry to Portick, Glasgow, six dozen eggs were found on delivery to be broken.

The Company stated that they had had the matter fully inquired into, but had been unable to discover where the damage occurred, the case having been handed over to the carrier at Portick in apparently good order, and a clear receipt obtained. The Company informed the Department that they had again issued instructions to their staff in regard to the necessity for special attention in the handling of the egg traffic.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co., 13th October, 1909.—That two consignments of game hampers forwarded on the 30th September from Liverpool, via Holyhead and Dublin, to Askeaton Station, and Ballyhunion, had not reached their destinations up to the 6th and 12th October, respectively.

The Department were informed by the Companies that portion of the first consignment reached Askeaton Station on the 5th and the remainder on the 7th October; and that the lot for Ballyhunion got out of course during transit. A claim in respect of the consignment for Ballyhunion was met, and a claim which was made regarding the other consignment was withdrawn.

GREAT SOUTHERN AND WESTERN RAILWAY Co.; LONDON AND NORTH WESTERN RAILWAY Co.; MIDLAND RAILWAY Co., 18th October, 1909.—That a cask of butter forwarded on the 4th August from Limerick, via Dublin and Holyhead, to Kettering was badly damaged in transit, and was refused by consignees.

A claim made in the case was met by the London and North Western Railway Company.

GREAT SOUTHERN AND WESTERN RAILWAY Co., AND OTHER COMPANIES, 18th October, 1909.—That eggs were broken in a consignment sent on the 23rd September from Tipperary via Waterford and Liverpool to Preston.



The Great Southern and Western Company stated that the eggs were consigned and forwarded via Dublin and Liverpool, that the consignment was forwarded at Owner's Risk, and that, unless there were some special circumstances to be brought forward, they could not see their way to meet a claim in the matter. Complainants were informed of the Company's decision, and did not further communicate with the Department in the matter.

CORK AND MACROOM DIRECT RAILWAY CO.; CITY OF CORK STEAM PACKET CO.; GREAT WESTERN RAILWAY CO., 28th October, 1909.—That of nine boxes of butter sent on the 27th September from Lissarda, Co. Cork, to Carraig, Glamorgan, only two were delivered to consignees, other boxes being delivered instead of the remaining portion of the consignment.

The Department were informed by the Cork and Macroom Direct Railway Co. that the consignment had been delivered to consignees in order.

CITY OF CORK STEAM PACKET CO., AND OTHER COMPANIES, 6th November, 1909.—That certain cases of eggs forwarded from Cork to Cardiff, Portsmouth and London were found on delivery to be damaged.

The Department communicated with the City of Cork Steam Packet Co. in regard to the transit of the consignments. The Company stated that the matters complained of were receiving attention, and that due care was given with a view to ensure the safe transit of the traffic.

GREAT NORTHERN RAILWAY COMPANY (IRELAND), AND OTHER COMPANIES, 9th November, 1909.—That a can of cream forwarded on the 20th August, 1908, from Drumquin, Co. Tyrone, to Newtown-on-Spey, was not delivered until the 26th August, being then unfit for use. (2) That a box of butter and a can of cream sent on the 24th August, 1908, from Drumquin, Co. Tyrone, to Newtown-on-Spey were not delivered to consignees.

(1) The Department were informed by the Great Northern Railway Company that delivery was effected on the 22nd August. (2) The Department were informed by the Great Northern Company that the butter was delivered on the 26th August. The Company also stated that they understood that the can of cream was upset by a loaded truck on the platform at Aberdeen Station, and that the Great North of Scotland Railway Co. declined to entertain a claim in respect of the loss sustained, as the consignment was carried at Owner's Risk.

DUBLIN AND SOUTH EASTERN RAILWAY CO., 22nd November, 1909.—That portion of a consignment of sixty chickens forwarded from Rathdrum Station to London was lost in transit.

The Department communicated with the Dublin and South Eastern Company in the matter, and a claim in respect of the loss sustained was met.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 20th November, 1909, 7th January, 1910.—That eight casks of butter sent on the 7th August (Saturday) from Kilmallock via Cork and the Clyde Shipping Company's boat to Glasgow, missed the Monday evening sailing from Cork, and were forwarded from Cork on Wednesday by the Shipping Company's boat which sailed by a circuitous route, calling at Limerick, and which was not due to reach Glasgow until the following Monday.

The Great Southern and Western Company stated that the butter met with some delay at Cork owing to a carters' strike and pressure of live stock traffic from a fair, and consequently missed the sailing on Monday.

Complainants were of opinion that the Company should have advised them that the butter had missed the sailing for which it was intended. The latter, however, stated that owing to the difficulties under which they were working at the time at Cork, it could not be expected that they could do so.

The consignment had been forwarded at Owner's Risk. A claim for £44 was made. The Company declined to meet this claim, but offered complainants the amount—£36—for which the butter had been disposed of. Complainants refused to accept this amount.

It did not appear that the case was one in which the Department could usefully take further action.

LAIRD LINE, LTD., 26th November, 1909.—That eggs were pilfered during transit from a case sent on the 17th November from Londonderry to Glasgow.

The Company informed the Department that the consignment passed out of their hands in apparently good order, a clear receipt being given by consignee.

G. & J. BURNS, LTD.; LAIRD LINE, LTD., 11th December, 1909.—That eggs were pilfered from consignments in transit from Londonderry to Glasgow.

An Inspector of the Department called at the Londonderry offices of Messrs. Burns and Laird Line. Both Company's agents stated that pilfering was practically impossible as the greatest precautions were taken.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 18th December, 1909.—That two boxes of butter forwarded on the 1st December from Cork to Mullingar were not delivered until six days after the date of despatch.

The Great Southern and Western Company stated that there was a delay of one day while the consignment was in their hands owing to pressure of traffic. Delivery was effected on the 8th December.

Writing to the Department in June, 1910, complainant stated that the arrangements for the conveyance of butter between the points had been satisfactory since the date of his complaint.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO.; MIDLAND RAILWAY (NORTHERN COUNTIES COMMITTEE); GREAT NORTHERN RAILWAY CO. (IRELAND). 23rd December, 1909.—(1) That fresh herrings from Buncrana intended for conveyance from Londonderry by the 3.30 p.m. train (Great Northern Railway) and by the 4 p.m. train (Midland Railway, Northern Counties Committee) were required to be delivered at the Londonderry stations as early as 2.30 p.m. and 2 p.m. respectively although formerly the fish had been accepted up to 10 minutes before the time for the departure of the train; and that these altered arrangements were damaging to the fishing industry, as when any considerable quantity of fish had to be dealt with it could not reach the stations until after 2.30 and 2 p.m. respectively, and had to be held over. (2) That the Great Northern Company had given notice that they would not accept fish traffic after 8 p.m. for conveyance by the 9.30 p.m. train from Londonderry to Dublin for England.

1. The Great Northern Company stated that they had been offered as much as 8 tons of fish for conveyance by the 3.30 p.m. train only 5 minutes before the time for starting. The Company stated that this train was a mail train and that fish traffic had to be loaded in the Goods Department, and that in fixing the latest time for the receipt of the traffic at one hour before the departure of the train they were giving as much latitude as they could without interfering with the prompt despatch of the train. The Committee stated that they had been offered as much as 60 tons of fish at a time for conveyance by the 4 p.m. train, and that this train was designed as a mail and passenger train only and was not intended for the conveyance of other traffic in large quantities. The Committee also intimated that owing to the short time available for the transfer of traffic at Ballymena and Larne they could not undertake to convey more than a few boxes of fish by the train, that large consignments should be sent by the 2.40 p.m. train, but that if necessary specials would be run in order to get the fish to Larne Harbour in time for shipment. The Department understood that fish for conveyance by the 2.40 p.m. train was received as late as 2.30 p.m.

2. The Great Northern Company stated that they did not understand where the difficulty arose in regard to fish from Buncrana intended for conveyance by the 9.30 p.m. train, as the Londonderry and Lough Swilly Company had a train leaving Buncrana at 5.20 p.m. due in Londonderry at 6 p.m., giving ample time to have the fish at the Great Northern Station by 8 p.m.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND),** 30th December, 1909.—That a box of butter forwarded on the 23rd December from Cork to Ardee had not been delivered up to the 29th December.

The Great Southern and Western Company stated that the consignment was transferred to the Great Northern Company at Amiens Street on the 24th and arrived at Ardee on the 28th December, on which date consignee was advised but did not take delivery until the 31st December. It appeared that there was no goods train by which traffic for Ardee could have been forwarded from Amiens Street between 4 a.m. on the 24th December and 4 a.m. on the 28th December—the Great Northern Company's goods depot having been closed on the 25th, 26th and 27th December.

**DUBLIN AND SOUTH-EASTERN RAILWAY CO.; LONDON AND NORTH-WESTERN RAILWAY CO.,** 7th, 10th and 12th January, 1910.—That five boxes of bacon forwarded from Ennisorthy to Manchester via Holyhead, and delivered on the 1st June, 1909, were found on arrival to be soaked with fish water.

The Department communicated with the Companies. A claim of £15 ls. made in the matter was met.

**LONDONDERRY AND LOUGH SWILLY RAILWAY CO.,** 19th January, 1910.—That in the case of consignments of salmon forwarded from certain places in Donegal to Birmingham icing was either not done or so badly done as to be quite ineffectual.

On the 14th March an Inspector of the Department reported that the Londonderry and Lough Swilly Company hoped to have at an early date two large bogie wagons in use so that the icing of consignments of fish could be done en route to Londonderry.

**LONDON AND NORTH-WESTERN RAILWAY CO. AND OTHER COMPANIES,** 20th January, 1910, 5th and 8th February, 1910.—That certain cases of eggs forwarded from Donegal to London were damaged in transit.

The Department had inquiry made, and complainants, writing on the 24th March, stated that the London and North-Western Company had agreed to meet them with regard to the claims made in respect of the consignments.

**GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES,** 29th January 1910.—(1) That cheese forwarded from Charleville to Manchester constantly arrived in a damaged condition. As an instance, it was mentioned that of one consignment of 50 baskets, 15 were found on arrival to be damaged. (2) That the delivery of returned empties—boxes or baskets in which cheese had been packed, sent from Manchester to Charleville, was unsatisfactory.

(1). The Great Southern and Western Company stated that the consignment mentioned passed all hands without remark, and that no complaint as to damage had been received until the day after delivery. The Company also stated that the cheese was freshly manufactured, and being therefore in a soft condition was most susceptible to damage in transit, and that the baskets in which the traffic was packed were not provided with lids. (2). On the 1st April the Great Southern and Western Co. stated that the matter had been taken up and that an improvement had since taken place in the traffic. The Department suggested to complainants that consignments should be packed in wooden cases or drums constructed of substantial boards. On the 27th July the manager to consignors informed an Inspector of the Department that for three months there had been no complaint as to damage; and that strong wooden boxes instead of baskets were then used for the conveyance of consignments.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.,** 3rd February, 1910.—That consignments of roll butter forwarded from a creamery at Kilmorna to Cork were frequently pilfered in transit.

The Company stated that inquiry had been made as to the conveyance of several consignments in regard to which claims in respect of pilferage

had been made by complainants, and that the consignments were found to have been delivered in the same apparently good condition as received from senders, the seals on the boxes and baskets being intact on delivery.

The Company also stated that special instructions had been given as to the reception of the traffic at sending point, and that since then there had been no complaints of shortage.

**GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 2nd February, 1910.** (1) That 2 lbs. of butter were pilfered from a consignment sent on the 12th August, 1909, from Cork to Nasington. (2) That a box of butter forwarded on the 26th October, 1909, from Cork to Wig-town, Scotland, was lost in transit. (3) That 2½ lbs. of butter were pilfered from a consignment sent on the 18th November, 1909, from Cork to Malmesbury.

(1). The Great Southern and Western Company stated that the consignment was forwarded on the 11th (not 12th) August, and that a claim of 2s. 1d. in respect of the loss sustained was met. (2) The Great Southern and Western Company stated that they had no trace of the consignment as forwarded from Cork on the date given, but that a claim of £1 11s. 6d. was paid in respect of a box of butter forwarded on the 27th October by complainants from Kilmallock to consignee. (3) The Great Southern and Western Company stated that a representative of the Great Western Company had seen the consignee, who stated that there was no butter missing from the consignment, and that a clear receipt was given on delivery.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 11th February, 1910.**—That two boxes of butter forwarded on the 2nd February from Cork to Edenderry were not delivered until the 8th February.

It appeared from inquiry that the butter was conveyed via Clara and did not reach Edenderry until the 7th February, but that if it had been forwarded via Dublin it would have reached Edenderry on the 5th February. Arrangements were made by the Companies for the carrying of consignments from Cork to Edenderry by the more expeditious route via Dublin.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 16th February, 1910.**—That a box of butter sent on the 13th July, 1909, from Kilmallock to Cork was not delivered.

A claim made by complainants in respect of the loss sustained was met in full by the Company.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.; MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 7th March, 1910.**—That a box of butter forwarded on the 1st March from Cork to a trader in Ballinrobe had not been delivered up to the evening of the 5th March.

The Department had the matter inquired into. A claim made by the consignor was paid in full.

**LONDONDERRY AND LOUGH SWILLY RAILWAY CO., 10th March, 1910.**—That four horned cows (untied) were loaded at Londonderry Station for conveyance in a wagon with a premium bull (tied) which was being forwarded from Londonderry Show to Kilmacrennan.

The Company held that in loading the animals together they did not violate any regulation as the bull was secured by the head. No injury resulted to the bull.

Arrangements were made by complainants to stipulate for the future, when sending premium animals on the smaller Railway Companies' lines, that they should not be loaded with other animals.

**MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; LONDON AND NORTH WESTERN RAILWAY CO., 15th March, 1910.**—That delays took place in the conveyance of consignments of eggs sent from Woodlawn to places in England.

The Companies looked into the matter. No further complaint as to the transit of such consignments was received.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH-WESTERN RAILWAY CO., 22nd March, 1910.—That consignments of butter sent on Saturdays from Limerick Junction to Bradford were not delivered until Tuesday afternoon or Wednesday, and that consignments sent on Fridays did not arrive regularly on Mondays.

The London and North-Western Company stated that they had taken up the matter of the transit of consignments between these points.

NORTH BRITISH RAILWAY CO., AND OTHER COMPANIES, 22nd March, 1910.—That consignments of eggs forwarded from Enniskillen to places in Scotland were carelessly handled by the Scottish Railway Companies.

An Inspector of the Department who interviewed complainant in the matter was informed that the damage chiefly occurred in the case of eggs sent to Musselburgh, and that in consequence of bad handling the trade with Musselburgh had to be discontinued. Complainant suggested that further action might be deferred pending a resumption of business with Musselburgh.

GREAT SOUTHERN AND WESTERN RAILWAY CO., 22nd March, 1910.—(1) That a crate of fowl forwarded on the 24th November, 1909, from Banteer to Dublin was mis-delivered by the Company, and that a loss of 18s. 6d. was sustained by consignors. (2) That a crate of fowl forwarded on the 1st March from Banteer to a firm in Dublin had not been delivered up to the 8th March.

(1) The Company stated that the crate of fowl was booked from Mill-street to sender's order on the 26th November, that delivery instructions were not received at Kingsbridge, Dublin, until the morning of the 27th November, and that owing to an error the consignment was not delivered to consignee. The Company also informed the Department that the firm to whom the consignment was delivered remitted the net proceeds realised (stated to represent the top market price) on the fowl to complainants. (2) The Company stated that the consignment was entered forward to Kingsbridge by the 10.30 a.m. train on the 1st March, but was not received at that station. The Company also informed the Department that on the 1st March a crate of fowl was received unentered at Cork and delivered to a trader in that city, who remitted the proceeds to complainants.

LONDONDERRY AND LOUGH SWILLY RAILWAY CO.; GREAT NORTHERN RAILWAY CO. (IRELAND); MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO.; GREAT SOUTHERN AND WESTERN RAILWAY CO., 25th March, 1910. (1) That two barrels of fresh herrings—portion of a consignment of four barrels—forwarded on the 8th February from Buncrana Station to Castlebar did not reach their destination until the 13th February, and were then in bad condition. (2) That two barrels of fresh herrings forwarded on the 8th February from Buncrana Station via Claremorris to Newport (Mayo) were not delivered to consignee. (3) That of two barrels of fresh herrings forwarded on the 8th February from Buncrana Station via Claremorris to Tuam one barrel was delayed four days in transit.

(1) The Midland Great Western Company stated that through an error two of the barrels were loaded in a through wagon from Londonderry to Carrick-on-Shannon, where they arrived unentered on the 10th February. Inquiry was made by telegram and the barrels were sent to Castlebar, arriving by the night mail on the 12th February. (2) The Great Northern Company stated that owing to insufficient address the consignment, which was handed to them with cross-Channel traffic, was forwarded to Newport, Wales, that the consignment was there salvaged, and that the amount realised was remitted to complainants. (3) The Londonderry and Lough Swilly Company stated that two barrels were received by them and duly transferred to the Great Northern Company, but that the Great Northern Company had informed them that one of the barrels was addressed to a trader in Castlebar, and was forwarded accordingly.

The Great Southern and Western Company stated that they delivered one barrel at Tuam on the 11th February.

**GREAT SOUTHERN AND WESTERN RAILWAY CO. AND OTHER COMPANIES, 10th April, 1910.**—That consignments of live poultry consisting of 20 crates forwarded on the 11th November, 1909, from Castleisland to Colchester, Paddington and Diss were loaded by the Company in a van which did not admit of proper ventilation; that 25 of the birds died during conveyance, and that the Company declined to meet a claim of £2 Gs. 6d. in respect of the loss sustained.

The Department communicated with the Great Southern and Western Company in the matter and were informed that the consignments were loaded in a van which was specially provided for the fowl traffic; that the fowl were conveyed in suitable vehicles on the respective lines of the other carrying Companies concerned; that the Colchester and Paddington consignments were delivered in good order, but that 18 ducks and 4 geese in the Diss consignment were found to be dead on unpacking, five more ducks dying subsequently. The Company stated that the death of the birds was attributed to their being too closely packed in the crates, and having to remain in a cramped position during the journey. The consignments were conveyed at Owner's Risk, and the Company refused to meet the claim.

**CORK AND MACROOM DIRECT RAILWAY CO., 21st April, 1910.**—That butter forwarded from a creamery at Lissarda was conveyed in unsuitable wagons over the Cork and Macroom Line.

The Department made inquiries in the matter and arrangements were made by the Company for the conveyance, in specially prepared wagons, of butter sent from stations on their line.

**GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 13th May, 1910.**—That three casks of butter forwarded on the 10th May from Limerick Junction to Bradford had not been delivered up to the 13th May.

The Department were informed by the London and North Western Company that the consignment met with some unavoidable delay during conveyance. The Company also stated that they had taken up the matter of the transit of consignments of butter between the points.

**GREAT NORTHERN RAILWAY COMPANY (IRELAND); G. & J. BURNS, LTD.; CALEDONIAN RAILWAY CO., 21st May, 1910.**—That six cases of eggs forwarded on the 14th May, from Cootchill to Glasgow, and thence to a firm in Dundee, were found to be very wet on arrival at Dundee.

Inquiries made in the matter failed to show how or where the damage occurred.

**LONDON AND NORTH WESTERN RAILWAY CO., 23rd May, 1910.**—That nine casks and two boxes of butter forwarded from Limerick Junction to Bradford and despatched from Holyhead at 12.40 a.m. on the 23rd May had not reached Bradford up to 7 p.m. on that date.

The London and North Western Company stated that, through exceptional causes, there was some little delay at Holyhead, and that the butter reached Bradford at 4.5 a.m. on the 24th May.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 3rd June, 1910.**—That a wagon of porter sent on the 1st June from Cork to Caherniveen had not been delivered up to the 3rd June.

From inquiries that were made in the matter the Department learned that the wagon was held over at Cork and at Killybeglin owing to goods trains being too heavily laden. Arrangements were made by the Company with a view to ensure the due delivery of future consignments.

**GREAT SOUTHERN AND WESTERN RAILWAY CO., 15th June, 1910.**—That in two crates of live poultry—portion of a consignment of 5 crates—forwarded on the 11th June from Clonmel to London, 19 birds were found on arrival to be dead.

From inquiries which were made by the Department in the matter it appeared that the crates in which birds were found on arrival to be dead were open to ventilation at the top only.

1. MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO. and GREAT SOUTHERN AND WESTERN RAILWAY CO. (2) MIDLAND GREAT WESTERN RAILWAY OF IRELAND CO., 16th June, 1910.—(1) That a parcel of stationery forwarded on the 13th April from Athboy to Ardmore, Youghal, was not delivered until six weeks later. (2). That a parcel of stationery sent on the 16th May from Athboy to Enniskillen had not been delivered up to the 16th June.

(1). The Department communicated with the Midland Great Western and Great Southern and Western Railway Companies in the matter. The latter stated that the consignment was handed to consignees' carters at Youghal on the 19th April, but that it appeared to have remained in the carting firm's store until the date of delivery. (2). The Company were unable to trace the delivery of the parcel, and a claim made in the matter was satisfactorily settled.

GREAT SOUTHERN AND WESTERN RAILWAY CO.; LONDON AND NORTH WESTERN RAILWAY CO., 18th June, 1910.—That two 56 lb. boxes of butter sent on the 28th May from Limerick, via Dublin and Holyhead, to Ellesmere Port, Cheshire, were not delivered until the 9th June.

The Great Southern and Western Company stated that the consignment was transferred to the London and North Western Company at Dublin about 6 a. m. on the 29th May.

The London and North Western Company stated that the butter reached Ellesmere Port on the 30th May and could have been had on application at any time from that date, but that unfortunately the boxes got separated from the invoice between Chester and destination, and were in consequence delayed in delivery. The Company expressed regret for the delay, and also stated that had the butter been properly labelled and addressed no delay would have occurred.

## SALE OF FOOD

I.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,  
ACTS IN THE COUNTIES

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
				£ s. d.		
Antrim, . . . .	97	—	—	—	2	—
Armagh, . . . .	106	1	1	0 13 6	1	—
Carlow, . . . .	54	2	2	1 15 0	2	—
Cavan, . . . .	89	1	1	0 4 6	—	—
Clare, . . . .	234	7	6	2 18 6	2	—
Cork, . . . .	636	30	30	23 14 1	4	—
Donegal, . . . .	169	—	—	—	—	—
Down, . . . .	144	1	1	0 2 0	5	—
Dublin, . . . .	223	2	2	1 12 0	11	5
Fermanagh, . . . .	46	1	1	1 2 6	—	—
Galway, . . . .	140	11	10	9 1 7	3	1
Kerry, . . . .	336	20	16	6 1 0	2	—
Kildare, . . . .	66	3	3	1 2 6	1	—
Kilkenny, . . . .	77	—	—	—	—	—
King's, . . . .	89	2	2	1 3 0	6	1
Leitrim, . . . .	56	1	—	—	—	—
Limerick, . . . .	235	7	5	2 4 0	1	—
Londonderry, . . . .	92	—	—	—	—	—
Longford, . . . .	41	—	—	—	—	—
Louth, . . . .	78	1	1	0 18 8	—	—
Mayo, . . . .	92	2	1	0 17 6	5	—
Meath, . . . .	108	2	2	2 6 9	9	1
Monaghan, . . . .	21	1	1	0 1 0	—	—
Queen's, . . . .	128	3	3	1 2 0	—	—
Roscommon, . . . .	51	2	2	1 9 6	—	—
Sligo, . . . .	28	—	—	—	—	—
Tipperary (N.B.), . . . .	152	1	1	0 11 0	—	—
Tipperary (S.B.), . . . .	135	1	1	0 12 7	5	—
Tyrone, . . . .	124	—	—	—	—	—
Waterford, . . . .	142	1	1	0 1 0	1	—
Westmeath, . . . .	137	1	1	0 15 0	5	—
Wexford, . . . .	42	—	—	—	1	—
Wicklow, . . . .	114	—	—	—	3	—
Total, . . . .	4,302	104	94	60 9 2	68	8
Total for Year 1908, . . . .	3,597	124	102	57 3 0	61	7

One sample of Margarine-Cheese was taken (in Co. Londonderry) during the period. There was no infringement of the Acts in regard to the sample.



## AND DRUGS ACTS.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE DURING THE YEAR 1909.

		Cheese.	Milk.			
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	54	312	10	9	7 3 6
—	—	12	35	9	7	10 13 6
—	—	1	47	3	3	3 19 6
—	—	20	97	2	1	0 4 6
—	—	4	163	5	5	3 17 6
—	—	9	665	49	41	32 4 7
—	—	56	103	1	1	0 5 0
—	—	84	186	17	14	10 4 6
5	12 5 0	34	1,011	25	23	74 8 6
—	—	2	29	—	—	—
1	0 17 0	11	267	16	12	17 4 6
—	—	9	179	18	13	8 5 3
—	—	2	46	—	—	—
—	—	4	95	4	4	2 14 6
—	—	20	55	2	2	0 18 0
—	—	10	60	7	7	5 8 0
—	—	5	360	10	7	3 2 4
—	—	35	31	1	1	0 10 0
—	—	12	50	2	1	0 5 0
—	—	—	18	2	2	2 15 0
—	—	4	140	15	15	12 12 6
1	1 0 0	35	49	2	2	1 18 6
—	—	5	24	1	1	2 0 0
—	—	9	79	1	1	0 15 0
—	—	7	96	8	8	5 17 6
—	—	—	16	1	—	—
—	—	16	141	2	2	1 13 0
—	—	1	446	13	11	7 6 7
—	—	67	131	—	—	—
—	—	1	100	1	—	—
—	—	54	216	6	4	24 8 6
—	—	3	41	4	3	5 12 0
—	—	17	86	4	4	5 17 0
7	14 2 0	*583	5,252	241	204	252 4 3
7	16 1 0	444	5,241	255	210	269 18 4

\* In only one case were proceedings instituted. The sample was taken in the Co. Antrim. The case was dismissed.

II.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER,  
ACTS IN THE COUNTIES DURING THE

COUNTY.	Butter.				Margarine.	
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.
				£ s. d.		
Antrim, . . .	37	—	—	—	—	—
Armagh, . . .	73	—	—	—	2	—
Carlow, . . .	23	—	—	—	—	—
Cavan, . . .	34	—	—	—	—	—
Clare, . . .	126	1	1	0 18 6	1	—
Cork, . . .	314	14	14	12 11 7	1	—
Down, . . .	63	—	—	—	2	—
Dublin, . . .	66	—	—	—	4	—
Dublin, . . .	145	—	—	—	5	—
Fermanagh, . .	18	—	—	—	—	—
Galway, . . .	64	3	3	2 4 6	—	—
Kerry, . . .	119	9	6	2 13 1	1	—
Kildare, . . .	29	—	—	—	2	—
Kilkenny, . . .	42	—	—	—	—	—
King's, . . .	35	—	—	—	4	1
Leitrim, . . .	29	—	—	—	—	—
Limerick, . . .	88	1	1	0 19 6	—	—
Londonderry, .	26	—	—	—	—	—
Longford, . . .	13	—	—	—	—	—
Louth, . . .	46	—	—	—	—	—
Mayo, . . .	23	1	1	0 12 6	4	—
Meath, . . .	37	—	—	—	2	—
Monaghan, . .	17	1	1	0 1 0	—	—
Queen's, . . .	54	—	—	—	—	—
Rosecommon, .	22	—	—	—	—	—
Sligo, . . .	15	—	—	—	—	—
Tipperary (N.R.),	73	—	—	—	—	—
Tipperary (S.R.),	58	2	2	1 9 0	4	—
Tyrone, . . .	53	—	—	—	—	—
Waterford, . .	74	2	2	1 1 0	—	—
Westmeath, . .	62	—	—	—	—	—
Wexford, . . .	13	—	—	—	—	—
Wicklow, . . .	59	—	—	—	—	—
Total, . . .	1,050	34	31	22 10 8	32	1

NOTE.—No samples of Margarine-Cheese were taken during the period.

MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE  
HALF-YEAR ENDED 30TH JUNE, 1910.

		Cheese.		Milk.		
No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Samples taken.	No. of Prosecu- tions.	No. of Convictions.	Penalties imposed.
	£ s. d.					£ s. d.
—	—	22	84	3	3	1 10 0
—	—	11	37	5	5	4 3 1
—	—	1	19	3	1	0 9 4
—	—	8	37	4	4	1 4 7
—	—	1	73	1	—	—
—	—	2	411	50	38	28 18 6
—	—	20	65	—	—	—
—	—	45	93	5	4	3 9 6
—	—	14	512	14	12	29 0 0
—	—	—	18	1	1	1 3 6
—	—	7	114	5	4	5 2 6
—	—	5	70	8	6	6 7 3
—	—	1	36	—	—	—
—	—	2	42	—	—	—
1	0 3 1	7	23	—	—	—
—	—	6	23	1	1	1 15 0
—	—	1	202	7	5	2 8 6
—	—	13	15	—	—	—
—	—	5	31	3	3	1 7 6
—	—	—	10	—	—	—
—	—	3	63	1	1	1 3 6
—	—	14	16	—	—	—
—	—	3	6	—	—	—
—	—	8	41	1	1	0 13 0
—	—	1	47	4	3	2 2 6
—	—	2	11	2	2	1 16 6
—	—	11	82	—	—	—
—	—	1	105	12	9	5 13 6
—	—	33	59	1	1	0 12 0
—	—	—	53	1	—	—
—	—	19	117	4	4	6 6 0
—	—	1	14	—	—	—
—	—	13	55	1	1	0 6 6
1	0 3 1	*289	2,673	137	109	105 12 9

\*No proceedings were instituted in respect of any of these samples.

III.—STATEMENTS GIVING PARTICULARS AS TO SAMPLES OF BUTTER,  
ACTS IN THE  
YEAR 1909.

Borough.	Butter.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Belfast, . . . . .	267	22	22	£ s. d. 78 10 0
Clongmel, . . . . .	59	1	1	1 2 0
Cork, . . . . .	137	10	10	11 0 0
Drugheda, . . . . .	26	2	2	2 2 0
Dublin, . . . . .	167	8	8	37 0 0
Kilkenny, . . . . .	2	—	—	—
Limerick, . . . . .	148	3	3	0 15 0
Londonderry, . . . . .	19	—	—	—
Sligo, . . . . .	2	—	—	—
Waterford, . . . . .	41	—	—	—
Wexford, . . . . .	14	—	—	—
Total, . . . . .	882	46	46	130 9 0
Total for Year 1908.	941	44	35	64 15 0

HALF-YEAR ENDED 30TH JUNE, 1910.

Borough.	Butter.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Belfast, . . . . .	128	4	4	£ s. d. 11 0 0
Clongmel, . . . . .	24	—	—	—
Cork, . . . . .	93	4	4	6 5 0
Drugheda, . . . . .	12	1	1	1 1 0
Dublin, . . . . .	88	7	7	25 0 0
Kilkenny, . . . . .	3	—	—	—
Limerick, . . . . .	62	1	1	0 1 6
Londonderry, . . . . .	9	—	—	—
Sligo, . . . . .	12	—	—	—
Waterford, . . . . .	26	1	1	0 19 0
Wexford, . . . . .	29	—	—	—
Total, . . . . .	486	18	18	44 6 6

\* No proceedings were instituted in respect of any of these samples.

† Prosecutions were instituted in respect of 9 of these samples, 7 convictions were obtained and penalties amounting to £8 5s. were imposed.

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## MARGARINE, CHEESE AND MILK TAKEN BY INSPECTORS UNDER THE BOROUGH8.

YEAR 1909.

Margarine	Cheese.	Milk.			
No. of Samples taken.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
56	9	694	24	34	£ s. d. 82 11 0
4	—	102	2	2	1 15 0
—	—	332	27	25	29 2 6
—	—	166	3	3	3 15 6
18	5	1,181	42	42	123 10 0
—	1	80	1	1	1 1 0
7	8	401	14	13	2 11 6
4	7	63	5	5	7 3 0
—	—	40	—	—	—
—	—	78	—	—	—
—	—	33	2	2	1 14 6
(*) 88	(*) 30	3,170	130	127	223 4 0
†112	24	3,322	170	163	322 5 0

HALF-YEAR ENDED 30TH JUNE, 1910.

Margarine	Cheese.	Milk.			
No. of Samples taken.	No. of Samples taken.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
41	4	375	20	20	£ s. d. 16 10 0
4	4	54	2	1	2 2 0
—	—	209	26	26	24 11 0
—	—	56	—	—	—
‡3	—	555	19	19	36 10 0
—	—	19	1	1	1 1 0
4	5	227	8	7	1 4 6
5	1	28	2	2	2 10 0
1	3	26	18	6	6 17 0
—	—	40	1	1	1 13 6
1	—	60	3	2	1 7 6
59	(*) 17	1,649	100	83	92 15 6

‡ In these three cases prosecutions were instituted and convictions obtained, penalties amounting to £3 10s. being imposed. No proceedings were instituted in respect of any of the other samples of margarine.

IV.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER TAKEN, UNDER THE SALE OF THE FOOD AND DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S OFFICERS DURING THE YEAR 1900.

BOROUGH OR COUNTY IN WHICH SAMPLES WERE OBTAINED.	BUTTER.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
<b>BOROUGH.</b>				
Belfast, . . . . .	1	—	—	£ s. d.
Clonsmel, . . . . .	3	—	—	—
Drogheda, . . . . .	7	—	—	—
Dublin, . . . . .	9	6	5	31 0 0
Kilkenny, . . . . .	15	1	1	1 10 0
Sligo, . . . . .	2	—	—	—
Waterford, . . . . .	7	—	—	—
Wexford, . . . . .	10	—	—	—
<b>COUNTY.</b>				
Antrim, . . . . .	30	—	—	—
Armagh, . . . . .	26	—	—	—
Carlow, . . . . .	24	—	—	—
Cavan, . . . . .	12	—	—	—
Clare, . . . . .	31	3	2	0 8 0
Cork, . . . . .	85	4	4	2 15 1
Down, . . . . .	44	*1	—	—
Dublin, . . . . .	26	3	3	6 18 0
Fernanagh, . . . . .	20	—	—	—
Galway, . . . . .	15	—	—	—
Kerry, . . . . .	39	4	4	2 1 2
Kildare, . . . . .	41	3	3	2 16 6
Kilkenny, . . . . .	21	—	—	—
King's, . . . . .	19	—	—	—
Leitrim, . . . . .	3	—	—	—
Limerick, . . . . .	10	—	—	—
Londonderry, . . . . .	28	—	—	—
Longford, . . . . .	12	—	—	—
Louth, . . . . .	7	—	—	—
Mayo, . . . . .	24	—	—	—
Meath, . . . . .	19	—	—	—
Monaghan, . . . . .	32	—	—	—
Queen's, . . . . .	29	2	2	1 13 6
Roscommon, . . . . .	13	—	—	—
Sligo, . . . . .	9	1	—	—
Tipperary (N.R.), . . . . .	22	—	—	—
Tipperary (S.R.), . . . . .	18	—	—	—
Tyrone, . . . . .	42	—	—	—
Waterford, . . . . .	24	—	—	—
Westmeath, . . . . .	17	—	—	—
Wexford, . . . . .	15	1	1	0 14 6
Wicklow, . . . . .	34	—	—	—
<b>Total, . . . . .</b>	<b>865</b>	<b>29</b>	<b>25</b>	<b>49 16 9</b>

\* Case withdrawn on payment of costs.

During the period one sample of margarine was taken in the County Borough of Belfast. The margarine was not, it appeared, marked strictly in accordance with the requirements, but it was not considered that proceedings could usefully be instituted in the case.

V.—STATEMENT GIVING PARTICULARS AS TO SAMPLES OF BUTTER AND MARGARINE TAKEN, UNDER THE SALE OF FOOD AND DRUGS ACTS, 1875 TO 1899, BY THE DEPARTMENT'S OFFICERS DURING THE HALF-YEAR ENDED THE 30TH JUNE, 1910.

Borough or County in which samples were obtained.	BUTTER.				MARGARINE.			
	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.	No. of Samples taken.	No. of Prosecutions.	No. of Convictions.	Penalties imposed.
Borough.				£ s. d.				£ s. d.
Drogheda, . . . .	4	—	—	—	—	—	—	—
Dublin, . . . . .	1	—	—	—	1	1	1	3 0 0
Kilkenny, . . . .	4	—	—	—	—	—	—	—
Wexford, . . . . .	4	—	—	—	—	—	—	—
County.								
Antrim, . . . . .	38	—	—	—	1	1	1	0 2 6
Armagh, . . . . .	34	—	—	—	—	—	—	—
Carlow, . . . . .	6	—	—	—	—	—	—	—
Cavan, . . . . .	8	—	—	—	—	—	—	—
Cork, . . . . .	46	1	1	0 13 11	—	—	—	—
Donegal, . . . . .	8	—	—	—	—	—	—	—
Down, . . . . .	49	—	—	—	1	—	—	—
Dublin, . . . . .	24	2	1	5 0 0	—	—	—	—
Fermanagh, . . . .	18	1	1	0 4 0	—	—	—	—
Galway, . . . . .	5	—	—	—	—	—	—	—
Kerry, . . . . .	29	3	3	1 16 0	—	—	—	—
Kildare, . . . . .	17	—	—	—	—	—	—	—
Kilkenny, . . . . .	12	—	—	—	—	—	—	—
King's, . . . . .	20	—	—	—	—	—	—	—
Leitrim, . . . . .	3	—	—	—	—	—	—	—
Limerick, . . . . .	33	—	—	—	—	—	—	—
Louth, . . . . .	13	1	1	1 5 0	—	—	—	—
Meath, . . . . .	17	—	—	—	1	1	1	0 11 6
Monaghan, . . . .	13	—	—	—	—	—	—	—
Sligo, . . . . .	8	—	—	—	—	—	—	—
Tipperary (N.R.), .	1	—	—	—	1	—	—	—
Tipperary (S.R.), .	10	—	—	—	—	—	—	—
Tyreene, . . . . .	21	—	—	—	—	—	—	—
Waterford, . . . .	16	—	—	—	—	—	—	—
Westmeath, . . . .	7	—	—	—	—	—	—	—
Wexford, . . . . .	16	—	—	—	—	—	—	—
Wicklow, . . . . .	6	—	—	—	—	—	—	—
Total, . . . . .	493	8	7	8 18 11	5	3	3	3 14 0

VI.—STATEMENT SHOWING, AS ON THE 30TH JUNE, 1910, THE  
 NUMBER AND DISTRIBUTION OF PREMISES REGISTERED  
 FOR THE MANUFACTURE OF, OR WHOLESALE DEALINGS IN,  
 MARGARINE OR MARGARINE-CHEESE.

BOROUGH OR COUNTY.	No. of Premises Registered for Wholesale Dealings in Margarine or Margarine- Cheese.	No. of Premises Registered for the Manufacture of	
		Margarine.	Margarine- Cheese.
BOROUGH.			
Belfast, . . . . .	48	—	—
Gloucester, . . . . .	2	—	—
Cork, . . . . .	8	2	—
Drogheda, . . . . .	1	—	—
Dublin, . . . . .	39	—	—
Limerick, . . . . .	3	2	—
Londonderry, . . . . .	2	—	—
Sligo, . . . . .	1	—	—
Waterford, . . . . .	4	—	—
Wexford, . . . . .	1	—	—
COUNTY.			
Antrim, . . . . .	5	—	1
Armagh, . . . . .	1	—	—
Down, . . . . .	1	—	—
Dublin, . . . . .	5	—	—
Fermanagh, . . . . .	1	—	—
Galway, . . . . .	1	—	—
Kerry, . . . . .	1	—	—
King's, . . . . .	2	—	—
Louth, . . . . .	1	—	—
Tipperary (S.R.), . . . . .	1	—	—
Westmeath, . . . . .	1	—	—
Wexford, . . . . .	—	1	—
Total, . . . . .	129	5	1



VII.—Statement showing, as on 30th June, 1910, the Number and Distribution of Premises registered as Butter Factories.

BOROUGH OR COUNTY.						No. of Butter Factories Registered.
<b>Borough :</b>						
Belfast,	.	.	.	.	.	1
Clemonel,	.	.	.	.	.	1
Cork,	.	.	.	.	.	21
Dublin,	.	.	.	.	.	1
Limerick,	.	.	.	.	.	3
Londonderry,	.	.	.	.	.	1
Waterford,	.	.	.	.	.	1
<b>County :</b>						
Armagh,	.	.	.	.	.	2
Cavan,	.	.	.	.	.	30
Clare,	.	.	.	.	.	2
Cork,	.	.	.	.	.	23
Donegal,	.	.	.	.	.	1
Fermanagh,	.	.	.	.	.	1
Kerry,	.	.	.	.	.	23
Lalrim,	.	.	.	.	.	5
Lisnerick,	.	.	.	.	.	1
Londonderry,	.	.	.	.	.	1
Longford,	.	.	.	.	.	4
Monaghan,	.	.	.	.	.	6
Tipperary (N.R.),	.	.	.	.	.	1
Tipperary (S.R.),	.	.	.	.	.	4
Tyrone,	.	.	.	.	.	5
Waterford,	.	.	.	.	.	5
Wexford,	.	.	.	.	.	4
Total,	.	.	.	.	.	145

BUTTER AND MARGARINE ACT, 1907.

LIST OF NAMES which have been approved by the Department for use in connection with Margarine, and in regard to which applications were received during the year ended the 30th June, 1910.

Apelle.	Plantell.
Coco.	Red Briar.
Dreadnought.	Red Rose.
Glow.	Royal Thistle.
Golden Flake.	Silver Slaney.
Goblet Flower.	Tit-Bits.
Golden Seal.	Tivoli.
Needle.	Trout.
Nutkosa.	Vee-Dee.

LIST of ANALYSTS acting under the Sale of Food and Drugs Acts,  
1875 to 1907, for the Boroughs and Counties in Ireland.

Local Authorities.	Name of Analyst.
COUNCILS OF BOROUGHS OF:—	
Belfast, . . . . .	J. Harold Totton, B.A., D.Sc., A.L.C.
Clonmel, . . . . .	Sir C. A. Cameron, C.B., M.D.
Cork, . . . . .	D. J. O'Mahony, F.R.S.
Drogheda, . . . . .	Sir C. A. Cameron, C.B., M.D.
Dublin, . . . . .	Do., do.
Kilkenny, . . . . .	Do., do.
Limerick, . . . . .	Do., do.
Londonderry, . . . . .	Professor John Robinson Leach, M.A., D.Sc., F.R.C.
Sligo, . . . . .	Sir C. A. Cameron, C.B., M.D.
Waterford, . . . . .	Do., do.
Wexford, . . . . .	Do., do.
COUNTY COUNCILS OF:—	
Antrim, . . . . .	Robert F. Blake, F.R.C., and J. F. W. Hodges, F.R.C., F.R.S.
Armagh, . . . . .	J. Harold Totton, B.A., D.Sc., A.L.C.
Carlow, . . . . .	Sir C. A. Cameron, C.B., M.D.
Cavan, . . . . .	Do., do.
Clare, . . . . .	Do., do.
Cork, . . . . .	D. J. O'Mahony, F.R.S.
Donegal, . . . . .	Charles McMillan.
Dorn, . . . . .	Sir C. A. Cameron, C.B., M.D.
Dublin, . . . . .	Do., do.
Fermanagh, . . . . .	Do., do.
Galway, . . . . .	Do., do.
Kerry, . . . . .	D. J. O'Mahony, F.R.S.
Kildare, . . . . .	Sir C. A. Cameron, C.B., M.D.
Kilkenny, . . . . .	Do., do.
King's, . . . . .	D. J. O'Mahony, F.R.S.
Leitrim, . . . . .	Sir C. A. Cameron, C.B., M.D.
Limerick, . . . . .	Do., do.
Londonderry, . . . . .	J. Harold Totton, B.A., D.Sc., A.L.C. (temporary).
Longford, . . . . .	Charles McMillan.
Louth, . . . . .	Sir C. A. Cameron, C.B., M.D.
Mayo, . . . . .	Do., do.
Meath, . . . . .	Do., do.
Monaghan, . . . . .	Do., do.
Queen's, . . . . .	Do., do.
Roscommon, . . . . .	Do., do.
Sligo, . . . . .	Do., do.
Tipperary, North Riding, . . . . .	Do., do.
Do., South Riding, . . . . .	Do., do.
Tyrone, . . . . .	Robert F. Blake, F.R.C.
Waterford, . . . . .	Sir C. A. Cameron, C.B., M.D.
Westmeath, . . . . .	Do., do.
Wexford, . . . . .	Do., do.
Wicklow, . . . . .	Do., do.

THE MERCHANDISE MARKS ACTS, 1887 AND 1909.

Regulations made by the Department of Agriculture and Technical Instruction for Ireland, with the concurrence of the Lord Chancellor of Ireland and of the Board of Trade, pursuant to Section 1 (1) of the Merchandise Marks (Ireland) Act, 1909, with regard to the Prosecution in Ireland of Offences under the Merchandise Marks Act, 1887.

1. The Department of Agriculture and Technical Instruction for Ireland shall, subject to the conditions in the next following Regulations prescribed, undertake the prosecution in Ireland of offences under the Merchandise Marks Act, 1887, in cases which appear to the Department to relate to Irish agricultural produce, or to the produce of any other Irish rural industry, and to effect the general interests of the country, or of a section of the community, or of a trade.

2. (i.) Every application to the Department to undertake a prosecution shall be accompanied by the following documents:—

(a) A statement showing the nature and circumstances of the case and sufficient to enable the Department to form an opinion whether the case relates to Irish agricultural produce, or to the produce of any other Irish rural industry, and affects the general interests of the country, or of a section of the community, or of a trade.

(b) A statement showing the facts which, if the Department undertake the prosecution, will be capable of proof, and setting out the proofs and names of witnesses available to prove such facts.

(ii.) The Department may require the above statements to be supplemented or additional evidence to be furnished.

3. If, on the evidence, the Department are of opinion that there is no reasonable prospect of a conviction being obtained, the Department will not, unless they think fit, undertake the prosecution.

4. If the Department are of opinion that the prosecution would be better or more properly conducted otherwise than under these Regulations, the Department will not undertake the prosecution.

5. The Department may, before undertaking a prosecution, require the applicant to give security for costs on such terms and in such manner as they think proper.

6. For the purpose of carrying these Regulations into effect, the Department may, from time to time, prescribe the use of such forms and give such directions as they may deem expedient.

T. P. GILL,

Secretary of the Department of Agriculture  
and Technical Instruction for Ireland.

14th April, 1910.

I concur in these Regulations.

S. WALKER, C.

The Board of Trade concur in these Regulations.

H. LLEWELLYN SMITH.

Secretary.

MARKETS AND FAIRS (WEIGHING OF CATTLE) ACTS,  
1887 AND 1891.

List showing the Fairs and Auction Marts in respect of which  
Exemption Orders were issued between the 1st July, 1909,  
and the 30th June, 1910.

Fair or Mart.	County or Borough.
Ardee, Park, Moenan & Sons' Mart.	Louth.
Ardrahan.	Galway.
Ballinacostello.	Mayo.
Ballinskough.	Roscommon.
Ballyconnell.	Cavan.
Ballynacally.	Clare.
Blennerville.	Kerry.
Bunlaghy.	Longford.
Carbury.	Kildare.
Castlehackett.	Galway.
Castlephunket.	Roscommon.
Charleville, M. S. Sheedy's Marts (two).	Coek.
Clonreddan.	Clare.
Cluggin.	Limerick.
Cobles.	Donegal.
Doonamona.	Mayo.
Drumdee.	Coek.
Fernahurpy.	Sligo.
Forry.	Roscommon.
Hagginstown.	Kilkenny.
Kilmore.	Galway.
Limerick, Elcill's Mart.	Limerick (Borough of).
Listowel, McElligott & Son's Mart.	Kerry.
Magheraelt, T. Larkin's Mart.	Leondonderry.
Mahanny.	Mayo.
Multyfarnham.	Westmeath.
Rathmolyon.	Meath.
Roundwood.	Wicklow.
Russelwood.	Kildare.
Tubber.	Galway.

# REPORT OF THE DIRECTOR OF THE GEOLOGICAL SURVEY OF IRELAND

*For the Year ending 31st March 1910.*

TO THE SECRETARY, DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND.

SIR,

I have the honour to submit the following Report on the work of the Geological Survey of Ireland for the year ending 31st March, 1910.

Mr. HENRY J. SEYMOUR, B.A., F.G.S., was appointed in October, 1909, Professor of Geology in University College, Dublin, and consequently resigned his position as Geologist on the Survey. The vacancy was filled by the transfer of Mr. W. B. WRIGHT, B.A., F.G.S., from the Geological Survey of Great Britain. Mr. Wright originally joined the Irish Geological Staff in 1901, and has since served both in England and in Scotland. He could not be set free from his work in the Isle of Mull until 1st July, 1910, and hence, with the consent of the Treasury, Mr. A. O. ROWAN, B.A., was appointed temporarily to carry on the work in his place in the Collections of the Survey.

The following memoirs were published during the year, and were accompanied by colour-printed maps issued within their covers:—

"On Rock specimens dredged from the floor of the Atlantic, and their bearing on submarine geology." By G. A. J. COLE and T. CROOK.

"The Geological Features and Soils of the Agricultural Station at Ballyhaise, Co. Cavan." By J. R. KILROE, H. J. SEYMOUR, and T. HOLLISSY.

The work in the field was mainly concerned with the mapping on the six-inch scale of a number of areas which had been hitherto dealt with only on the small scale of one inch to the mile. These areas include important parts of the counties of Donegal and Londonderry. Various questions of stratigraphy and rock-structure have been considered during this detailed work, including the question of the possibility of an overlap of the Upper Basaltic series of northern Ireland over the Lower Basalts north-west of Lough Neagh.

A survey of the superficial deposits of Clare Island was carried out, and the opportunity was taken for a reconsideration of the rocks and geological structure of the island. Unfortunately, despite careful research, no fossiliferous beds could be discovered other than those containing plant-remains of Lower Carboniferous age. The soils of the island were sampled for examination in the laboratory.

The investigation of the soils of the Agricultural Station of the Department at Clonsilla, Co. Cork, was continued.

Mr. W. D. HASEN, A.R.C.S.C.I., was employed throughout the greater part of the year as temporary Professional Assistant for the determination of the characters of soils, and for chemical work in the Survey Laboratory. An examination of soils from typical Irish districts is proceeding, in con-

sultation with the County Agricultural Instructors, who have experience of problems that arise in practice in connection with the soils of special areas.

At the request of the Commissioners, evidence was given on behalf of the Survey before the Royal Commission on Coast Erosion.

Among the numerous inquiries that were answered during the year, often in co-operation with the Economic Geologist of the Department, questions as to the efficient road-metal and local water-supply were prominent. A brief notice of Irish Iron ores was prepared, at the request of Professor Henry Louis, for the use in the treatise of the iron resources of the world, published by the International Geological Congress in 1910.

The following scientific papers were contributed during the year :—

G. A. J. COLE :—"A late Glacial Clay at Templeogue, Co. Dublin." *Irish Naturalist*, 1909, p. 232.

"The Picture-Rock or Scrined Rock near Rathmullan, in the County of Donegal." *Proc. R. Irish Acad.*, Vol. XXXVIII, Sect. B, p. 113.

I am, Sir,

Your obedient Servant,

GRENVILLE A. J. COLE,  
Director.

REPORT OF THE DIRECTOR  
OF THE  
NATIONAL MUSEUM OF SCIENCE AND ART  
FOR THE  
YEAR 1909-10.

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

SIR,—I have the honour to submit the following Report for the twelve months from 1st April, 1909, to 31st March, 1910 —

In presenting my Annual Report I desire to say that the Museum is steadily advancing in usefulness. The number of students making constant use of the Museum has very considerably increased during the past year in the departments of Natural History, Geology, and of Arts and Industries. In the Herbarium alone, the number of registered students has been more than doubled. To encourage the study of our collections I have offered prizes for competition among students of the Metropolitan School of Art for the best series of drawings from objects in the Museum. Several of the drawings executed in this competition have been found worthy of circulation in the Australian Colonies, with other work of the School.

Of recent years there has been a falling off in the attendance of the general public at the Museum; a like reduction in the number of casual visitors is recorded in the leading English museums. I believe that public interest in the Museum can be greatly increased by the development of our collections illustrating the historical changes, the arts, and the social and industrial conditions of Ireland. We have recently been able to add, by loan and purchase, examples of craftsmanship that are suitable models for students of Art and Technical Schools.

In the Circulating Division, 49 new cases have been added. We have prepared a new series of cases illustrative of the anatomy and diseases of animals, and have added a set of diagrams for the use of lecturers and of agricultural pupils. Eighteen cases have been sent to Ballyhase Agricultural School and seventeen to Glonskilly Agricultural School. We have 318 circulation cases, and 589 number of the cases have been made this year.

In the Art and Industrial Division the most important accession has been the collection of pottery, porcelain and glass, brought together by the late Mr. T. H. Longfield, F.R.S., which was purchased for the Museum. This is perhaps the most valuable addition made to the Museum collections for many years. We have also purchased an interesting Irish Chalice. A considerable addition of notable specimens has been made to the Ethnographical Collections, and we have also acquired some interesting historical jewels.

It has been found desirable to make a new classification of the exhibits in the Natural History Division, Zoological Section, and this and the Geological and Mineralogical collections are now brought into closer relation, and are thereby made more serviceable to the working student.

In the Irish Antiquities Division a number of objects, for which proper provision could not be made otherwise, have been placed in the west crypt. These include such important exhibits as the great canoes, and a large number of Ogham inscribed stones. This new gallery is lit with prismatic glass and electric light, and makes a valuable addition to the space in the Museum. In the gallery

adjoining the Royal Irish Academy collection, several plaster casts of Irish crosses and of architectural detail are now placed.

On the 15th January, I received notice from the Executors of the late Patrick Murphy, of Newry, of a bequest of £5,000 to the Museum.

I have now established an understanding with several Museums regarding the exchange system—the Governor-General of the Australian Dominion, Lord Dudley, kindly communicated some suggestions in this matter to the Australian museums, and we have relations with the museum at Perth. The Governor-General of New Zealand, Lord Plunket, has also done his best to encourage an interchange between the New Zealand museums and ours.

During my visit to London I obtained some valuable loans for the Museum; I also took part in the foundation of the India Society, established partly for the purpose of bringing to Europe examples of the distinctively native arts of India.

Various local museums are being opened in Irish provincial towns, and the Museum has already sent serviceable exhibits to the Museums of Belfast, Cork and Derry.

The introduction of prismatic glass lighting of the Museum has been of such service that it is desirable that it should be further extended.

The electric light is still unsatisfactory because, even where greatly diffused, it remains insufficient for the student who can only work in the evenings.

The overcrowding of the Museum space is at present so great that many objects cannot be fairly studied in any light, and I would urge the importance of the erection of the proposed new wing of the Museum.

I append the reports from the heads of the various sections, as well as the returns of attendance, and lists of acquisitions and loans.

G. N. COUNT PLUNKETT,  
*Director.*

#### APPENDIX I.

RETURN SHOWING NUMBERS OF VISITORS TO THE NATIONAL MUSEUM  
OF SCIENCE AND ART.

Months.	Totals. 1908-1909.	Week-days. 1909-1910.		Sundays.	Totals. 1909-1910.
		Mornings.	Evenings.		
April, . . . .	25,964	19,198	778	2,784	23,760
May, . . . . .	25,143	19,748	758	2,590	23,456
June, . . . . .	27,312	21,074	634	2,403	24,116
July, . . . . .	23,246	23,235	691	2,910	26,744
August, . . . .	34,374	28,517	810	3,799	33,126
September, . .	29,579	23,266	583	3,034	26,883
October, . . . .	24,541	18,084	447	3,617	22,148
November, . . .	19,476	17,820	477	2,970	21,267
December, . . .	21,384	16,565	532	2,474	19,511
January, . . . .	20,786	18,126	391	2,342	20,859
February, . . .	19,610	14,663	329	2,429	16,851
March, . . . . .	21,332	18,638	450	3,114	21,602
	297,180	237,704	6,790	34,431	279,325



## APPENDIX II.

## REPORT OF THE KEEPER OF THE IRISH ANTIQUITIES DIVISION.

During the year 165 objects have been registered; of these 47 were deposited by the Royal Irish Academy and included two interesting mediæval wooden hats found near Rosaura, an ecclesiastical bell in good preservation, and a number of interesting ethnological objects presented by Mr. H. S. Crawford, M.R.I.A., and Mr. R. Welch, M.R.I.A. Fifty-eight objects were added to the collection by direct purchase, and included some bronze and stone objects and three spinning wheels, purchased from Mr. F. W. Powell. Some casts of antiquities, moulded by the Museum staff, were also added to the Collection.

The arrangement of the Crypt has been proceeded with, and all the canoes and most of the Ogham inscribed stones have been moved down into it from the Gallery, and the large canoe from Co. Mayo has been brought in and is now available for study. The bronze pots and querns from Room III. have also been brought down to the Crypt, and a large collection of early ecclesiastical tiles has also been displayed, and a case containing spinning wheels and a cloth wheel. The collection of iron pike heads has also been placed in a case in the Crypt.

Casts of Corinæ's Chapel, the doorway and Cross of Dyseri O'Dea, and the Shrine from Holyrood Abbey have been set up on the Gallery, and in the wall cases a number of interesting ethnographical objects have been displayed.

Mr. Armstrong had the privilege of visiting Germany during the year to study the museums, and especially the methods of conserving antiquities. This important branch of museum work is made an especial study in Germany, where a preparation room and conservator are attached to all the large Antiquarian Museums. Much work of this kind has to be attempted by half measures in my division, owing to the want of a laboratory and preparation room.

A number of clay urns have been repaired during the year and made ready for exhibition, and casts of a valuable set of moulds, for casting bronze spear heads found in Co. Tyrone, and in the possession of Mr. Sullivan, have been obtained for the Museum.

The Guide to the Celtic Christian Antiquities was published in October and was most favourably received in Germany, France and the United States. The first edition has now been exhausted, and I am preparing a second with some additions.

(Signed). GEORGE COFFEY.

## APPENDIX III.

## REPORT OF THE KEEPER OF THE ART AND INDUSTRIAL DIVISION.

The work of arrangement and re-arrangement of the objects in the various sections in this Division of the Museum has gone on steadily during the past year, as the detailed statement below shows, and some arrears, due to the inadequacy of the staff in past years, have been worked off.

On the 15th of April, 1909, Mr. G. R. Stanton, appointed after competitive examination, commenced duty, and judging by the efficiency he has shown during the past twelve months, he will prove a very valuable addition to the staff.

TRAVELLING.—Mr. Toppin went to England in March, 1910, and visited the following institutions:—Liverpool Museum, where he was very courteously assisted by Mr. Entwistle; Salford Royal Museum (Peel Park), where the Curator, Mr. B. H. Mullen, M.A., a former colleague in the Dublin Museum, kindly showed him the Collections; Stoke Museum, whose Curator, Mr. Caddy, kindly obtained introductions for him to Minton's Pottery Works and Show-rooms, Wedgwood's Works and Museum, the Wedgwood Institute, and Deacon's Pottery Show-rooms at Burslem.

In November, Mr. Westropp visited Cork to make some inquiries in connection with the glass industry there in the eighteenth and early nineteenth centuries.

Mr. McGowan visited the Victoria and Albert Museum, the British Museum, and the Wallace Collection, in July, 1909.

In September, 1909, I visited the following cities:—

Bruges.—Léon de Looze Collection in the Museum.

Brussels.—Musée du Pays du Cinquantenaire.

Berlin.—Kunstgewerbe Museum, Post Office Museum, Ethnographical Museum, Kaiser Friedrich Museum, The Old Museum, The New Museum, the German Costume Museum.

London.—The Victoria and Albert Museum.

In April, 1910, I went to London and secured a valuable Irish silver chalice at Christie's, and visited the Victoria and Albert Museum, the Guildhall Museum, and the South Museum.

GREEK AND ROMAN COLLECTIONS.—No additions of importance have been made to these collections.

EGYPTIAN AND ASSYRIAN COLLECTIONS.—It is hoped that more attention will be given to this and the Greek and Roman Collections during the coming year. The interesting east of portion of the great staircase of Artaxerxes Oebus, Persopolis, has been replaced on the main staircase wall, from which it was removed some years ago.

ETHNOGRAPHICAL COLLECTIONS.—A number of valuable specimens, brought to Dublin from New Zealand about forty years ago, have been acquired, also some interesting objects from Africa, Sarawak, and the Marquesas Islands.

Dr. Crawford gave a number of figures used in the puppet plays in Java, also of great interest.

The light in this room has been immensely improved by the insertion of the new prismatic glass in the windows. It is hoped that the construction of continuous casing along the east wall, to replace the present detached cases, which are very wasteful of valuable space, will be commenced this year. Some half-dozen additional standards have been fitted to the tops of the large free-standing cases to take spears and javelins which have hitherto had to be exhibited inside those cases, and obstructed the view of objects arranged on the shelves.

IRISH ETHNOGRAPHICAL COLLECTION.—A few additions have been made.

INDIAN AND PERSIAN COLLECTIONS.—No additions or re-arrangements have been made.

MUSICAL INSTRUMENTS.—A few additions of interest have been made, viz., a vihar by Gibson, Dublin, dated 1779; a bi-jaga othar, a diplo-kithara, by Light, of London; an English harp-lute, an early dulcimer, and an Æolian harp. This collection was inspected in the summer by the Rev. F. W. Galpin, the well-known instrument collector, who was much interested in it, and obtained a photograph of the diplo-kithara, to be figured in his forthcoming work on old English instruments. He gave some valuable information about several of the specimens.

FURNITURE.—A small Beale casket is the principal addition to the Furniture. To relieve the congestion here it is proposed to send some of the examples of English furniture on loan to the provincial museums. A very interesting example of early 16th century interior wall decoration (a section of painted plaster) from a room in Lincoln's Inn, London, put away for some years for want of space, has been placed in a position where it may be well seen over the mantelpiece from Coler Castle. For want of a more suitable position, the fine reproduction of a portion of the stained-glass window from the Sainte Chapelle, Paris, has been set up in front of one of the windows in Room VIII.G. To be seen properly it should be let into an outer wall with a southerly aspect, but this is not possible at present.

BOUTIQUE.—Some twenty items of bijouterie have been acquired, including a very good reproduction of the celebrated Alfred jewel in the Ashmolean Museum, Oxford, silver and enamel snuff-boxes, silver badge of the Philharmonic Society, 1785, badge with miniature of Charles I., and several interesting pieces of personal jewellery. The cases containing these collections have been removed to the north side of the Central Court, in the general re-arrangement of the objects under the gallery.

**COINS AND MEDALS.**—The coin collection has received a good deal of attention this year: 286 coins have been added, most of which belong to the English section, and we have been able to eliminate a number of poor specimens and replace them by others in excellent condition. Two pieces of Peking tin money of quaint form have been acquired.

Nearly two dozen items have been added to the medals, mostly of Irish interest. They include a gold medal of the Friendly Brothers of St. Patrick, a silver medal of the Relief of Londonderry, and a curious little silver medalet of Dean Swift.

**COSTUME.**—Several items of 18th century civil costume have been acquired, as well as some examples of military costume of Irish interest, including helmets, chacoas, sashes, belt plates, &c. With these have been exhibited a large frame the interesting regimental colour, breast-plate, sash, &c., of the Ballynashinch Volunteers, given by Mr. R. Bruce Armstrong.

**ARMS AND ARMOUR.**—The re-arrangement of this collection continues, several upright cases with pyramids having been added to hold European small arms.

**CARVED IVORIES, &c.**—A few items have been added to the ivories, including a small portrait plaque of Thomas Davis, a diptych leaf, 14th century French work, and a beautifully carved head of the Infant Saviour, portion of a statuette, probably 16th century, German work. An interesting little 17th century Italian trinket box with subjects in relief in gesso has been added to these collections. From the Longfield Collection has been added an extremely rare and beautiful figure of the Saviour in carved wood, painted and gilt, the work, it is believed, of the 17th century Spanish artist Alonso Cano. Another addition from the same collection is a carved and painted wood figure of a man in the 18th century costume, from an old Dublin shop front.

Two very beautiful busts in white marble, Mars and Minerva, the work of Canova, lent by Mr. D. J. Lawrence, have been placed in a large upright case in the middle of the room.

**JAPANESE COLLECTION.**—A very fine suit of armour has been acquired, also a number of interesting utensils in carved ivory, bone, and wood. Two very beautiful specimens of modern lacquer work have been lent by Gen. Sir Thomas Kelly-Kenny, G.C.B.

**POTTERY, PORCELAIN AND GLASS.**—The important collection of pottery, porcelain and glass lent by the relatives of the late Mr. T. H. Longfield two years ago and exhibited in the Central Court, has been purchased, and, duplicates and less valuable specimens having been eliminated, has been arranged in a series of cases along the middle of the pottery room. The work of registering this collection, which consists of close on a thousand specimens, is being done by Mr. Toppin. A great deal of search in the literature of ceramics is necessary for the identification and accurate description of very many of the pieces, and a good number of these have been found to be of much greater interest than was supposed when the collection was acquired. Some of the objects are almost, if not quite, unique, and of great value. A pair of porcelain mugs of early Liverpool transfer printed ware was sold at Christie's in February last for £42; there is a similar pair in the Longfield collection. A pair of Bow porcelain sphinxes in the collection has been valued by several connoisseurs at £100. The Chinese porcelain is no less interesting than the European, and the acquisition of the collection has added enormously to the importance of the ceramic collection in the Dublin Museum. The duplicates and less valuable pieces will be useful for circulation or as loans to the provincial museums.

Other additions include a small collection of modern Wedgwood ware of the best quality, a plate marked Donovan, Dublin, a pin tray of Worcester porcelain painted with a view of Drumscondra Bridge, an eighteenth century majolica lion, formerly used as a Dublin shop sign, Wedgwood busts of Moses and Shakespeare, and two early Worcester fruit baskets.

A dozen interesting examples of Irish glass, and nearly as many English, chiefly Bristol, have been acquired. Miss Longfield has lent a valuable collection of Irish and English glass.

**CHINESE, BURMESE AND CEYLONESE COLLECTIONS.**—Several rich examples of embroidery (including costume) have been acquired and displayed. A very interesting collection of coloured clay figures, given many years ago by Mr. A. E. Sidford, but temporarily placed in store some time ago, have been again

arranged in a free standing case. They give in miniature an excellent idea of the physical characteristics and costume of the Chinese people.

A few examples of Burmese art, including a gilt lacquered shrine, a book chest, and an interesting bronze drum-shaped gong from the Karen hills, have been added.

Two fine pieces of wood carving and six ceremonial masks from Ceylon, which were on loan for some years, have been purchased.

**EMBROIDERIES AND TEXTILES.**—A richly-embroidered chasuble with panels containing needlework pictures of saints, and the arms of Sir John Forte, dated 1687, is the most important addition. A valuable 17th century Italian chasuble has been withdrawn from circulation as it was being injured by excessive exposure to strong light. The beautiful embroidered pilaster hanging, formerly inadequately exhibited in one of the wall-cases, has been framed and placed against one of the pilasters in Room IX. G. Six additional frames for strips of embroidery have been placed on the north wall, and two small draw-out cabinets to hold illustrations of embroidery and lace have been added. The Dun Emer Guild tapestry, and the large coloured photographs of tapestries have been hung in the Annex.

**LAKE.**—Some forty specimens of needle-made and bobbin-made lace have been secured for this collection, Italian, French, and Flemish. A very interesting old burmese of old Lisefok tambour lace, white silk on a black ground, has been acquired and is exhibited in the costume collection.

Mr. Paulsen Townsend, in his report to the Royal Dublin Society on the needlework sent in for the Art Industries Exhibition of 1909, referred to the white embroidery in the Museum as being of great excellence and worthy of being studied by our workers.

A valuable collection of lace photographs has been presented by the Metropolitan Museum, New York, at the instance of Mr. John H. Buck of that Museum.

**METAL WORK.**—A pair of handsome brass hearth ornaments, French, 18th century, have been secured.

To the pewter collection have been added an interesting old Irish chalice, and a set of oil stocks. About half-a-dozen interesting examples of Sheffield plated ware have been purchased.

The silver collection has been materially augmented, and the additions include some very interesting items, viz., four Irish chalices of the 17th and 18th centuries, a freedom box presented to Geo. Ogle by the Corporation of Cooks in 1775, and a high standing cup and cover, presented to Lambert Braham by the Limon Merchants of Dublin in 1779. The historic series of spoons has had one addition, dated 1723-4. Mr. John Malhall has lent a large collection—eighty-seven pieces of silver plate, chiefly Irish.

**BOOKBINDINGS.**—A couple of specimens of 18th century Dublin work, and a very beautiful example of modern French binding (by Thivet, of Paris) have been added. Exhibited with these are two autograph albums of Sir Charles Gieseke, the celebrated numismatist, one of which was purchased, the other presented by the Misses Huston.

**ENAMELS.**—Capt. Gordon Hutchinson lent ninety specimens of Betteuses and Billeter Enamels, and Mr. W. R. Moss two pieces of modern work by Mrs. Traquair.

**PHILOLOGICAL INSTRUMENTS.**—This small but interesting collection has been removed from the Central Court to the Annex. Several additions have been made, notably a very curious and well made universal sundial by Lynch, of Dublin, early 19th century.

**INDUSTRIAL COLLECTION.**—Several joinery models have been added, including a quarter-circle staircase handrail. A beautiful model of a staircase has been lent by Messrs. Dovling and Sheerin. A case showing the different stages in the manufacture of kid gloves has been arranged by Mr. Macartney Filgate. A model of a salmon hatchery at Lismore has been lent by the Fisheries Branch of the Department.

**PHOTOGRAPHS OF SILVER PLATE.**—This year we have been indebted to Messrs. John Smyth and Sons for allowing us to photograph several very interesting pieces of silver-plate.

**ARCHITECTURAL PHOTOGRAPHS.**—Mr. T. J. Westrupp has lent us a large number of his negatives of Irish architectural remains, and from these photographic enlargements have been made for this collection.

**POSTAGE STAMP COLLECTION.**—Mr. Lane Joynt has kindly continued his services gratuitously in stronging this collection. Mr. Stanton has spent part of each day for the greater part of the year in registering the collection, which numbers close on nineteen thousand specimens. It is now the most important public collection in Europe, hardly excepting those in the British Museum, London, and the Post Office Museum, Berlin, and it differs from the former in that it is being kept up-to-date by having new issues from all parts of the world incorporated in it.

**MUSEUM LIBRARY.**—About one hundred and forty volumes have been added to the reference library.

**LOANS TO METROPOLITAN SCHOOL OF ART.**—The following is a summary of the objects lent for study by the Students this year:—

**EMBROIDERIES AND TEXTILES:**

Three frames of Alhambra Embroideries.

Five specimens of Spanish, &c., Ecclesiastical Embroideries.

One specimen of Chinese Embroidery.

**LACE:**

Frames (four specimens) Retiella Lace.

**WATER-COLOUR PAINTINGS:**

Nine frames.

**FURNITURE AND WOODCARVING:**

Twelve specimens, various.

**POTTERY:**

Twelve examples.

**MISCELLANEOUS:**

Twenty photographs of art objects.

Wrought Ironwork, two examples.

Bronze Vase, &c., &c.

About sixty items in all.

**CIRCULATION COLLECTIONS.**—There were 589 issues this year. There are now 318 frames available—84 new ones having been prepared, these including 18 agricultural cases sent to Ballyhaise and 17 to Clonakilty.

The lists of (a) Chief Acquisitions by Purchase; (b) Gifts; and (c) Loans, are appended.

J. J. BUCKLEY.

(a.) CHIEF ADDITIONS BY PURCHASE.

**Ethnographical Collections (Room III., G.F.).**

Collection of Macri Objects—54 specimens.

Set of Tools for working gutta-percha from Sarawak.

Scaptra, Marquesas.

**Musical Instruments (Room VII., G.F.).**

Cithar, by Gibson, Dublin.

Bajaga Cithar, English.

Diplo-Kithara, by Light, London.

Glass Dulcimer, Longman, London.

Æolian Harp.

Harp Lute.

**Furniture (Rooms VIII., IX. and X., G.F.).**

Boule Caseot, French, 18th century.

Back-light Holder. Irish.

**Costume (Central Court).**

Chasuble with coat-of-arms of Sir John Perce, and dated 1557.

Two Chasubles, Italian, 18th century.

Lace Mantle, white silk on black net. French, early 19th century.

Several portions of German Peasant Costume.

Several Irish Volunteer and other military Helmets and Chasces.

Several Portions of Civil Costume of the 18th and early 19th century.

**Bijouterie (Central Court).**

Reproduction of the Alfred Jewel.

Collection of engraved seals (66).

Claddagh ring.

Four snuff boxes, shell, horn, enameled, &c.

**Coins, Medals, &c. (Central Court).**

Two pieces of Pahang tin money.

Ecu d'or Louis XII. (about 1500).

Thirty Roman Imperial coins.

Collection of English, Irish, and Scottish silver coins (120). English gold (5), and English, Irish and foreign, bronze (70).

Ten Irish Bank tokens, silver.

Copper Token of Maculla, Dublin, 1729.

Eighteen pieces of "Gun money."

Medal, gold, Friendly Brethren of St. Patrick.

Medal, gold, Coronation of Queen Victoria.

Medal, silver, Relief of Londonderry, 1689.

Medal, silver, Duke of Ormonde, 1682.

Medal, silver, Charles I. and Henrietta Maria, 1625.

Medal, silver, York Club, Dublin, 1824.

Medal, silver, Dean Swift.

Medal, silver, Irish Rifle Association.

Medal, silver, Paris Exhibition, 1878.

Medal, silver, Royal Agricultural Society, Ireland, 1884.

Medal, bronze, Pope Leo XII.

Medal, bronze, Pope Gregory XVI.

Medal, bronze, Cardinal Richelieu.

Medal, bronze, Henri II. of France.

Medal, bronze, Louis XIV.

Medal, bronze, Battle of Marengo.

Medal, bronze, *Établissement du Culte*.

Medal, bronze, Commune, 1792.

Medal, bronze, Rousseau.

Medal, bronze, Franco-British Exhibition, 1908.

Medal, brass, Loss of Minerva, 1768.

**Ivories, &c. (Room VI., First Floor).**

Leaf of Diptych, French, 14th century.

Crucifix, carved bone, probably Irish, 17th century.

Ivory Cusoo portrait of Thomas Davis.

Ivory Head of the Infant Christ, German, 16th century.

Trinket Box, with gesso reliefs, Italian, 17th century.

**Japan (Room VII., First Floor).**

Suit of Japanese Armour.

**Pottery, Porcelain, and Glass (Room VIII., First Floor).**

Pottery Lion, formerly used as a sign for a Dublin Dolphin and Glass Warehouse.

" Bowl, Staffordshire, early 18th century.

" Tiles (2) Liverpool transfer printed, 18th century.

" Plate marked "Donovan, Dublin."

" Wedgwood ware, seven pieces.

Porcelain Pen tray, Worcester, with view of Drumcondra Bridge, Dublin.

" Fruit Baskets, Worcester, 18th century.

" Group "The Poscher," Derby.

" Butter-cooler and candle cup, with M'Gee's crest, Chinese.

" Cup and Saucer, "Jesuit" porcelain.

Glass Candelabrum, Irish.

" Sided Bowl, Irish.

" Celery Glass, Irish.

" Goblet, Irish.

" Sagar Bowls (2), Irish.

- Glass Butter Dish, Irish.  
 " Jugs (2), Irish.  
 " Teddy Glass, Irish.  
 " Decanter and Tumbler by Pugh, Dublin.  
 " Sweetmeat Stand, English, 18th century.  
 " Goblet, English, 18th century.  
 " Wineglass, English, 18th century.  
 " Bottles (3), English, 18th century.  
 " Sugar Bowl and Ewer, English, Bristol.  
 " Sailor's Love-token, Bristol.
- China, Burma, and Ceylon (Room IX., First Floor).  
 Chinese Robe, embroidered gauze.  
 " Lady's Costume.  
 " Trinket Box, carved ivory.
- Burmese Shrine.  
 " Book chest.  
 " Panel.  
 " Bronze Gong.
- Cingalese Masks (6).  
 " Wood Carving (2 pieces).
- Embroidery, Textiles, &c. (Room X., First Floor).  
 Panel of Embroidery, English, 17th century.  
 Four Samplers, early 19th century.
- Lace (Main Gallery).  
 Altar Cloth, drawn and embroidered linen, 18th century.  
 Chalice Cover, needlepoint, 18th century.  
 Cap Crown, point d'Alençon.  
 Bridal Veils (2), Brussels.  
 Crochet Collar, Irish, 1840-50.  
 Baby Caps, lace insertions, 18th century.  
 Milanese Lace Cape.
- Bookbindings (Main Gallery).  
 Crimson pigskin, modern French (Thivet).  
 Red Morocco, Dublin, late 18th century.  
 Red calf, Dublin, late 18th century.
- Metalwork (Main Gallery).  
 Pair of brass hearth ornaments, French, early 19th century.  
 Pewter chalice and oil stocks.
- Sheffield Plated Ware (Rotunda Gallery).  
 Mezzaroni dish.  
 Goblets.  
 Soup ladle.  
 Cessers.
- Silver (Rotunda Gallery).  
 Paten, Dublin, 1807.  
 Saucepan, Dublin, 1717.  
 Salver, Dublin, 1773.  
 Pair of tankards, Dublin, 1708.  
 Spoon, Dublin, 1723.  
 Sandlers tray, Dublin, 1780.  
 Soup bowls, Cork, 1780.  
 Chalice and paten, Limerick, 1718.  
 Chalice, Irish, late 17th century.  
 Mounted coconut, Irish, late 18th century.  
 Chalice, Irish, 17th century.  
 Chalice, Irish, late 18th century.  
 Cup and cover presented to Lambert Brehasen by the Dublin Linnen Merchants in 1779.  
 Freedom box, presented to Geo. Ogle by the Corporation of Corks.  
 Chalice and paten, London, 1760.  
 Cruet, London, 1776.  
 Pair of candlesticks, London, 1768.

## (b.) LIST OF LOANS.

- Cary, Capt. Clarence :  
Helmet, Queen's County Rifles.
- Cary, Capt. Geo. S. :  
Busby, Welsh Fusiliers.  
Two Chaco, R.I.C.  
Three epaulettes, and belt plate.
- D'Arcy, James F., Esq., D.L. :  
Collection of silver plate (nine pieces).
- Dillon, J., Esq. :  
Grave of Charles I.
- Dillon, Gerald A. J., Esq. :  
Silver medal of Pope Leo XIII.
- Dillon, T. A., Esq. :  
Half-crown of Charles I.
- Dux, E. R. McClintock, Esq. :  
Chest of the Corporation of Hostlers and Knitters, Dublin, 1688.
- Dowdall, J. C., Esq. :  
Book :—*Essays on the Microscope*, by Adams, London, 1787.
- Dovling, J., Esq., and Sheerin, J., Esq. :  
Model of staircase.
- Fishbourne, Miss Mary :  
Shoofield plated asparagus tongs.
- Garner, Miss :  
Four Chinese wags and Japanese teapot.
- Green, Mrs. J. R. :  
Old damask table cloth.
- Green, Charles, Esq. :  
Two pieces of modern Danish porcelain.
- Hawkes, Messrs., & Co. :  
Collection of helmets and chaco (9), 18th and 19th century.
- Henniker-Heaton, Hon. Mrs. J. :  
High Sheriff's saddle cloth, Irish, 18th century.
- Henning, C. L., Esq. :  
Silver tankard.
- Howard, Hon. Hugh.  
Mace and door plate of the Aldermen of Skinners' Alley.
- Hutchinson, Capt. Gordon :  
Collection of Battersea and Bilton enamels (90).
- Hutchinson, Mrs. Gordon :  
Two Persian enamelled pottery plaques.
- Jerome, Lucien J., Esq. :  
Linen altar cloth.
- Jones, Rev. H. Arabin :  
Three military coats, and two pairs of epaulettes.  
Book :—*Treatise of Artillery*, by Muller, London, 1768.
- Kelly-Kenny, General Sir Thomas, G.C.B. :  
Japanese lacquer box and writing case.
- Lawrence, D. J., Esq. :  
Two marble busts by Canova.
- Massy-Dawson, Mrs. Julia Eliza :  
Assiatic clock.  
Clock with Boulle decoration.
- Massy-Dawson, F. E., Esq. :  
Gold haircomb.
- Moss, Wm. R., Esq. :  
Two pieces of modern enamel, by Mrs. Traquair.
- Mulhall, J., Esq. :  
Collection (87 pieces) of old silver plate.
- Muriel, Mrs. :  
Collection (58 specimens) of Burmese and Soudanese objects.



- Pienkett, Countess :  
Egan harp.  
Royal Alfred Yacht Club :  
Silver cup and cover.  
Scott, Mrs. Florence K. :  
Model of Bear wagon.  
Westropp, M. S. D., Esq. :  
Six chacoas, English and Irish.  
Volunteer coat.

## (c) LIST OF DONATIONS.

- Armstrong, R. B., Esq. :  
Court Sword, English, early 19th century.  
Pistol, Spanish (?), late 17th century.  
Regimental Colour, finial, breast plate, sash and cartridge box plate,  
Ballynahinch Volunteers, 1779.  
Bate, E. R., Esq. :  
25 British stamp and three Chinese stamps.  
Bellingham, T. E., Esq. :  
Half Farthing, 1844; and One-third Farthing, 1902.  
Benson, J. W., Esq. :  
Flagon, by Astick, London, early 19th century.  
Blake, Sir Henry :  
Collection of boomerangs, Australia.  
Board of Education :  
Two Bronze medals by W. Wyon, 1852-6.  
British Museum, Trustees of the :  
Medallie Illustrations of the History of Great Britain and Ireland.  
Plates CL to CX.  
Brooksbank, Ralph, Esq. :  
Book :—Pictures and engravings at Haughton Hall, Torporley.  
Carnegie Hero Trust Fund, per Wm. George, Esq. :  
Two copies bronze medal, as awarded for bravery.  
Carroll, Capt. M. H. :  
Two pennies and one tenth of penny, Nigeria.  
Chute, C. G. F., Esq. :  
Irish Volunteer Jacket.  
Cooke, J., Esq., M.A. :  
Photograph of Maori Chief.  
Crawford, H. S., Esq., B.E. :  
Collection of puppets used in Burmese sacred dramas.  
Two Japanese tooth brushes.  
Day, R., Esq., F.S.A. :  
Glass decanter, "Waterloo, Co. Cork," early 19th century.  
Dobbyn, R., Esq. :  
Two Roman pottery lamps.  
Dowdall, T. J., Esq. :  
Lucernal Microscope, by Adams; English, c. 1780.  
Egypt Exploration Fund :  
Collection of antiquities from Abydos and El Maharna, Egypt.  
Egyptian Research Account :  
Book :—Memphis, Vol. I.  
Elliot, T. J. S., Esq. :  
Three tokens, Irish, early 19th century.  
Everth, Miss :  
Sword, stick and bands of the Rev. Charles Wolfe.  
FitzSimons, J., Esq. :  
Cartouche box, Argyll Highlanders, 1839.  
Flood, W. H. Grafton, Esq., Mus. D. :  
Pamphlet :—Dulfin Harpsichord Makers of the 18th century.

- Hoban, M., Esq. :  
Watson's Irish Almanack, 1759.
- Holmes, S. A. M., Esq. :  
Medal; Wellington and Binscar.
- Hutton, the Misses :  
Autograph Album of Sir Charles Girdlestone.
- Jones, Francis J., Esq. :  
Painted rushwork, Samoa.  
Band of painted straw, New Zealand.
- Kemp, Mrs. :  
Zulu snuff box, necklet, bracelet, and spoon.
- King, Rev. R. G. J., B.A. :  
Londonderry glass bottle.
- Longfield, Miss :  
Earthenware flower holder.
- Longfield, W. D., Dep. Insp. Gen. :  
Chinese blue and white porcelain vessel.
- Lyen, R. N., Esq., M.D. :  
Satin play bill, Theatre Royal, Dublin, 1842.
- Maldon, Geo. Pugin, Esq., M.D. :  
Ivory horn, shield, bow, arrows and two head dresses, from Central Africa.
- Maldon, Major :  
Entongoili, shoo dish, shield, javelin, &c. from Uganda.
- Metropolitan Museum, New York; per J. H. Buck, Esq. :  
Collection of photographs of lace (117.)
- Mitchin, J. H., Esq. :  
Tobacco pipe, West Coast of Africa.
- Molloy, Mrs. :  
Roman copper coins (8); Half-crown and Halfpenny, James II.
- Montgomery, Mrs. E. S. :  
Five pieces of lace, early 19th century.
- Pennsylvania Museum, Philadelphia :  
Six Art Handbooks.  
Quarterly Bulletin.
- Redford, Symmer, Esq. :  
Token; Secession of Hanover, 1837.
- Reisinger, Esq. :  
Book—Exhibition of Contemporary German Art.
- Rhadenia, Government of :  
Set of current postage stamps.
- Rogers, Rev. Louis :  
Ten penny note, York County Bank, 1811.  
Five penny note, "Bank in England," 1811.
- Roth, Bernard, Esq. :  
Four pamphlets on Ancient British gold coins.
- Sinclair, Thomas, Esq. :  
Print:—Lisburn and Lambeg Volunteers, 1782.
- Southern Nigeria, Government of :  
Set of current postage stamps.
- Stedman, M., Esq. :  
Bicycle, early type.
- Thompson, R., Esq. :  
Mulready envelope caricature.
- Trevolyan, Major H. :  
Photographs of Station Island, Lough Derg.
- Webb, Lt. Col. E. A. H. :  
Five bell cups for chalice.
- Wedgwood, Messrs. Josiah & Sons :  
Catalogue of the Wedgwood Museum.

Westropp, M. S. D., Esq. :

Fragments of glass from site of Waterloo Glass Works, Cork.

Medal, Irish Surplus Revenue, 1753.

Collection of oolite (8.)

Book ; with bookplate by Dawson, Dublin, 18th century.

Westropp, Mrs. Dudley :

15 Lady's silk bodice and gentleman's shirt, Irish, early 19th century.

Wynne, Mrs. A. A. :

Plate of lace, Limerick (?), 19th century.

Part of founce, Spanish, 19th century.

#### APPENDIX IV.

##### REPORT OF THE KEEPER OF THE NATURAL HISTORY COLLECTIONS.

The collection illustrating the various furs used in trade and the inferior kinds employed in imitating the better class of furs has been completed. Small models of some of the whales are now exhibited along with the skeletons. Since the establishment of regular fisheries for whales in Ireland, these interesting creatures have received more attention, and it is satisfactory to know that a new method has been devised to display the leading characteristic points of these marine mammals to the public. In the General collection the spirit specimens are as far as possible being replaced by models or stuffed examples so as to reduce the amount of alcohol in the exhibition cases. Owing to these constant additions to that part of the Museum containing all the study collection preserved in spirit, scarcely any space is available there now. It becomes increasingly difficult even to find room for anything on the floor, and as the specimens can no longer be arranged so that they may be readily found when wanted, more space is urgently required.

The addition to the spirit store which is being built is not yet complete.

A considerable increase has taken place in the number of students who consult the Natural History Collections. A special series of Zoological specimens was set apart some years ago, and a room partitioned off for students. This room has now been converted again into an ordinary exhibition room for the public. I think it most desirable that a room containing specimens that can be handled by students, and a few standard works on Natural History, should be provided in the Museum, exclusively for students.

The construction of the new entrance to the Natural History Division of the Museum made it imperative that some changes in the disposition of the Collections contained in the lower room should take place. Two-thirds of that room were hitherto devoted to the display of the collections illustrating the Irish Fauna, but all Irish fossil animals were still housed in the Annex along with the minerals, rocks and the general series of fossils. It has now been decided to exhibit the Irish Fauna both recent and extinct together in the lower room of the Natural History building, and to disperse the small collection illustrative of the Geographical distribution of animals. The arrangement of specimens into geographical regions is open to certain objections, and in any case those regions are no longer considered valid or applicable to all groups of animals.



The rearrangement of the lower room was commenced in February last. It has also been suggested to bring all the Natural History Collections into closer proximity to one another, and to incorporate all fossil animals with the recent ones. It is to be hoped that this will be carried out. The lighting of the lower room of the Natural History Museum, which was very deficient, is being improved by the substitution of patent ribbed glass for the ordinary window panes on the south side.

I beg herewith to enclose lists of the descriptions of specimens and books.

(Signed), R. F. SCHMIDT.

## NATURAL HISTORY COLLECTIONS.

## DONATIONS 1909-10.

- Andrews, Mrs. :  
Cell of Solitary Bee on Azalea Branch from India.
- Ashworth, Dr. J. H. :  
Small Collection of Diptera and Larvæ of *Achseromyia latula* from N. Nigeria.
- Balfour-Brown, F. :  
Five specimens of *Apus cancriformis* from Scotland.
- Bedel, Mons. Louis :  
Small collection of Coleoptera from France.
- Best, Capt. W. H. G. H. :  
Collection of Flies (Diptera) from Opebo, S. Nigeria.
- Bradley, T. :  
Abnormal Hen's Egg from Killybegs.
- Burke, J. P. :  
Death's Head Moth (*Acheronia atropis*) from Pallas Green, Limerick.
- Campbell, D. C. :  
Skin of *Pycnonotus zosterocoma* and a few Birds' Eggs from India.
- Campbell, Rev. W. H. :  
Small collection of Lepidoptera from Southern India.
- Carpenter, Prof. G. H. :  
Camel Tick (*Ornithodoros savignyi*) from Aden.  
*Achseromyia latula* and larva from Katagum, N. Nigeria.  
*Hemiscerus kassisi* from Entebbe, Uganda.
- Champion, G. C. :  
Small collection of British Coleoptera.
- Coghill, M. P. :  
Eggs of Fulmar Petrel and Ringed Guillemot from St. Kilda.
- Colgan, N. :  
A few Fish, Corals, &c., from Sandycove and Dalkey.
- Cornes, Dr. F. :  
*Ascidia cyanea* from the Thames at Twickenham.   
Calcareous concretions (Neolithic), deep in gravel from the Thames at Battersea.
- Darling, J. P. :  
Collection of Coleoptera from Mashonaland.
- Dublin Steam Trawling Co. :  
Crab (*Parasquilla caudata*) from 100 miles off S.W. of Ireland.
- Dwyer, J. :  
*Pectocella ougei*, from Killybegs.
- Fahie, W. J. :  
Crombill (*Loxia curvirostra*) from Co. Dublin.
- Foord, Dr. A. H. :  
A few corals, &c.
- Forbes, A. C. :  
Two specimens of Hymenopteron (*Metastigmus*) from Avedale, Co. Wicklow.   
Bark of Ash, bored by *Hylesinus areolaris*, from Tipperary.
- Foster, N. H. :  
*Porcellio laevis* from Trillick, Co. Kerry.
- Freke, P. B. :  
Brimstone Butterfly (*Gonepteryx rhamus*) from near Rathangan, Co. Kildare.
- Gardiner, W. :  
Nightjar (*Caprimulgus europaeus*) from Meade, Co. Westmeath.
- Gilmore, James :  
Seven specimens of Pollen (*Coregonus pollen*) from L. Bea.
- Gleeson, M. :  
Semi-albino variety of Fieldfare (*Turdus pilaris*) from King's Co.

- Going, Rev. John :  
A few Neuroptera from Cahir.  
Freshwater Crayfish (*Astacus flavissimus*) and a few Fish from River Suir.
- Gordon, Dr. E. T. :  
Large Shell (*Barton nitida*) from Marotsland, S. Africa.
- Gordon, R. :  
Beetle (*Exosoma pyrenaeum*) from Finglas, Co. Dublin.
- Grant, Col. C. C. :  
A collection of Silurian and Devonian Fossils from Ontario, Canada.
- Halbert, J. N. :  
Three specimens of Beetle (*Thaenidia hospita*) from Lucan, Co. Dublin.  
Collection of Psocidae, chiefly from Co. Dublin.  
*Metapenarthrus melanurus* from Howth.
- Halliday, T. :  
*Stylodrilus hallidayi* from River Annalee, Co. Cavan.
- Hapsburg, Miss Corleone :  
Specimens of Garnet from Arabia.
- Hardy, J. B. :  
Small collection of Coleoptera from England and Ireland.
- Holt, E. W. L. :  
Collection of Coelenterates and Sponges from off the Shetlands and Portugal.
- Hutton, H. :  
Specimens of Cockroach (*Doryctes rhomboides*) from India.
- Inishkea Whaling Station :  
Whalebone plates of Common Rorqual, Sæbald's Rorqual and *Balaenoptera borealis*, and two teeth of Sperm Whale from off West Coast of Ireland.
- Jackson, J. W. :  
Small collection of Animal Remains from Dog Hole, Kent.
- Joy, Norman :  
Small collection of British Coleoptera.
- Keane, F. H. :  
Ray's Bream (*Brama raiti*) from Youghal.
- Kemp, S. W. :  
A submarine Beetle (*Agabus robinii*) and a submarine Bug (*Acropeltus bonnari*) from Blacked Bay.  
A specimen of *Tetradoclinus marginatus*.  
A collection of British Coleoptera.
- Kew, H. Wallis :  
Small collection of Coleoptera from South of Ireland.  
Two specimens of False Scorpion (*Chelifer cyrenus*) from Richmond Park, Surrey.  
Nine specimens of False Scorpion (*Obolus maritimus*) from Kilmaree Bay, Kerry.
- King, Rev. R. G. :  
Piece of Whalebone of *Balaenoptera musculus* from Magilligan Strand, Co. Derry.
- Levinson, Dr. G. M. L. :  
Two specimens of Pelagic Polychaete Worm (*Tricliopora lobifera*).
- Longfield, J. E. :  
*Scorpium dactyloptera*, from Clonsilla Bay, Co. Cork.
- Longfield, R. E. :  
Head of Young Rabbit with abnormal teeth.
- McCready, Dr. C. J. :  
Snake (*Tropidonotus scutellatus*) caught at Howth.
- McWeeney, Dr. :  
Well-Shrimp (*Niphargus bohemius*) from a deep well in Co. Westmeath.
- Mather, Miss A. :  
A buff variety of Wren (*Troglodytes parvulus*) from Carbury, Co. Kildare.
- Milne, J. N. :  
Small collection of Insects from Clare Island.

- Nicholson, Dr. G. W. :  
 Staphylinid Beetle (*Quedius nigricipes*) from Balrath, Co. Meath.
- Nuttall, G. H. F. :  
 Small collection of Ticks (*Ixodidae*).
- O'Mahony, Pierre :  
 Two skins of Bee-Eater (*Merops apiaster*) from South Bulgaria.
- Ormonde, Marquis of :  
 A Reeve's Pheasant (*Phasianus reevesi*). Male.
- Pack-Bersherd, D. R. :  
 Small collection of Ichneumonidae from Bagenalstown, Co. Carlow.  
 Nest and contents of Wasp (*Vespa austriaca*) and contents of nest of  
*Vespa rufo*, from Bagenalstown, Co. Carlow.
- Pentland, R. C. :  
 Four specimens of Rudd (*Leuciscus cephalotus*) from Dunkeer, Co.  
 Louth.
- Phillips, R. A. :  
*Paludetrina confusa* and a few Woodlice from near Limerick.  
 Six specimens of *Lemnaea involuta* from Barley Lake, Co. Cork.
- Power, Mrs. :  
 Small collection of Butterflies, &c., from Rio de Janeiro, Brazil.
- Præger, R. L. :  
 Anemolite and Cave Pearls, from Mitchelstown Caves, Co. Tipperary.
- Riddell, W. :  
*Spinther oniscoides*, from Larne Lough.
- Robertson, Mrs. R. Tait :  
 Skeleton of Dexter Bull.
- Rogers, Mrs. Gilbert :  
 Nest of Termites with Queen, Workers, Parasitic Beetles, &c., from  
 Bersar, India.
- Rousselot, C. F. :  
 Four Microscopical Slides of Rotifers, &c.
- Royal Zoological Society :  
 A few Birds, Mammals, &c.
- Scharff, A. :  
 Lower premolar tooth of *Machærodus* sp. from Pictou Lake  
 deposit near Sherman, S. California.
- Scharff, Dr. R. F. :  
 Abnormal Hen's Egg.  
 Rock specimens of Loess, and a few Land and Freshwater Shells from  
 Loess, from Villedranche sur Saône, France.  
 Collection of Mammalian and Bird Remains from La Grive St. Albans,  
 near Lyon.
- Scharff, J. :  
 Two specimens of Dragon Fly (*Synaptetrum striolatus*) from the Botanic  
 Gardens, Glamevin.
- Sharp, Dr. David :  
 A few British Coleoptera.
- Sharp, Dr. W. E. :  
 A small collection of British Coleoptera.
- Smith, R. W. and R. J. Usher :  
 Animal remains from Kitchen Middens, Transva.
- Southern, R. :  
 Some type specimens of Worms from Co. Dublin.
- Spray, W. B. A. :  
 A few Insects from the Argentine Republic.
- Spring Rice, the Hon. Mary, and Miss L. Stephens :  
 Freshwater Sponges (*Heteromeyenia Syderi* and *Euspongia lacustris*)  
 from Carragh Lake and L. Yganavan, Co. Kerry.
- Stelfox, A. W. :  
 Six specimens of *Valente murrisoni* from Fevensey, Level, Sussex.

- Stephens, Miss J. :  
Collection of Freshwater and Marine Invertebrates from Achill, Lough  
-burg, &c.
- Tattersall, W. M. :  
Exotic Earthworm (*Pheretima indica*) from Belle Vue Gardens, Man-  
chester.
- Toulas, J. C. B. :  
Small collection of rare British Coleoptera.
- Usher, R. J. :  
Collection of Birds' Nests from British Isles, Iceland, &c.
- Walker, H. :  
A few specimens of Peacock Ore, &c., from Cork and Kerry.
- Wallis, H. M. :  
Two eggs of Reed Bunting (*Emberiza schoenolus*) from off Aranmore,  
Co. Donegal.
- Welch, R. :  
*Subulina octona* from West Indies.  
*Sinagra goodalli*, and a few Insects, &c., from Belfast.  
Small collection of Irish Invertebrates.
- Weesché, W. :  
A collection of British Diptera.
- Westropp, D. :  
Specimens of *Spiloxena mendica* from Monkstown, Co. Dublin.  
A specimen of *Cassida equestris*, with pupae, from Monkstown, Co. Cork.
- White, Col. T. D. :  
Bird remains firmly cemented together from Levant Cave, Gibraltar.
- Whitehead, Henry :  
A small specimen of peaty deposit from the Dogger Bank.
- Williams, A. :  
Dunkin (*Tringa alpina*) from Achill Island and Sanderling (*Calidris  
aresaria*) from Dublin Bay.
- Williams & Son :  
Nine Embryos of Stout from Glasnevin, Co. Dublin.  
Two embryo Oysters from Corcfin, Co. Clare.

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## APPENDIX V.

## REPORT OF THE BOTANICAL DIVISION, 1909-1910.

The new cases for Rooms II. and IV. are ready, and the rearrangement of the Economic Collections begun. A large number of economic specimens have been acquired from Dr. Hochreutiner of Geneva, collected by himself in Java, Barnes and Howard, and these are in process of incorporation. Several collections have been obtained for the Herbarium, including:-

- A collection of Agricultural Weed Seeds prepared by Prof. Percival.
- A set of rare British Hepaticae from W. H. Pearson.
- Herbarium Dendrologium. Dr. C. Bœnke.
- Herb. Cryptogamium Rossicum.
- Fungi Eschleriana. Petrack.
- Gramina Hungaria. A. von Degen.
- Myxomycetes Exsiccati. Otto Jaap.
- Fungi Selecti. Otto Jaap.

These have all been mounted and incorporated.

During the year 493 students have consulted the various collections in the Herbarium.

The Teaching Collections in the Index Room have also been largely made use of. A large number of plants have been identified for correspondents and visitors.

T. JOHNSON.

## LIST OF DONATIONS.

- Fogarty, Dr. G., Limerick :  
Two large photographs of *Populus nigra* at New Ross, Co. Wexford.
- Holmes, Miss Frances :  
Specimen of Indian Bark.
- La Nawa, Miss :  
Twenty-one specimens of Petrified Wood.
- Moore, F. W. :  
Specimen of *Banksia* from Australia.
- O'Sullivan-Bore, Dr. R. :  
A box containing specimens of woods from Rio de Cartas district.
- Seedinsky, N. C. :  
Herbarium Cryptogamium Rossicum Fasc. I. and IV.

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The distribution of Lichens in Ireland.
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- Bennet, Arthur :  
Plants of the Faroe Islands, not occurring in Great Britain, and others not occurring in Shetland, Orkney, Caithness or the Outer Hebrides.
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Leaflets 97, 208, 210, 214 and 218-220.
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- British Museum, Trustees of :  
Publication No. 10. Instructions for Collectors.
- British Basidiomycetes, by W. G. Smyth.
- Contributions from the United States National Herbarium :  
Vol. XII, Nos. 5-9. Vol. XIII, No. 2.
- Director, Royal Botanic Gardens, Kew :  
Bulletin of Miscellaneous Information, Vol. X.

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Annals of Royal Botanic Gardens, Calcutta, Vol. XI., Part I. Text and Plates—*Asiatic Palms* (species of *Calamus*).

Imperial Department of Agriculture for West Indies, Nos. 55-52.

Manchester Museum, Handbooks. Chapters from the Evolution of Plants by Prof. F. E. Weiss.

West Indian Bulletin, Vol. IX., No. 4. Vol. X., Nos. 1-3.

## APPENDIX VI.

### REPORT OF THE CUSTODIAN OF THE MINERAL AND GEOLOGICAL COLLECTIONS.

During the year the most important change has been the transference of the collection of Irish Minerals to Annex Room III., where they now follow the General Collection of Minerals. The rock-collection has been rearranged in Annex Room II., which thus becomes devoted to more purely geological specimens. By arrangement with the Zoological division of the Museum, a new and much more convenient workroom for the officer in charge of the mineral collections has been provided, opening from the Geological Survey corridor.

The following are the more important specimens obtained by purchase during the year:—

*Patronite* and *Quisquickite* from Peru; the former is rich in vanadium sulphide, while the latter, associated with it in the vein, consists of sulphur and carbon.

*Kraakite*, a very handsome blue sulphate of copper and sodium, from Chile.

A "reconstructed ruby," to show how alumina can be crystallised artificially with the characters of true ruby.

*Phenacite*, newly discovered crystals of this gem-like beryllium silicate, from Brazil.

*Muscovite*, a green micaceous mineral from California.

*Glaucite*, a hydrous carbon from Utah.

*Chrysocolla*, an unusually handsome specimen of this hydrous copper silicate from Utah.

A geological and hypsometric model of the island of Santorin, by Signor Aureli of Rome, was added to the illustrations of volcanic phenomena.

A loan of mineral specimens and rocks from the reserve series was made to assist the instruction given in the Technical School, Ballymonee, Co. Antrim.

(Signed), GREENVILLE A. J. COLE.

## APPENDIX VII.

### GEOLOGICAL SURVEY COLLECTIONS.

During the first half of the period covered by this report these collections were in the charge of Mr. H. J. Seymour, who resigned his position on the Geological Survey when appointed to the Professorship of Geology in University College, Dublin. Mr. T. Halliday was then nominated as officer in charge, and he proceeded with the preparation of a series of Irish building and ornamental stones, to be arranged in the central cases of the corridor, and with the arrangement of the Irish fossils on the lines contemplated by Prof. Seymour. Owing to the fact that Prof. Seymour's successor on the staff of the Survey was unable to take up his duties before the 1st of April, 1910, Mr. A. C. Rowan was temporarily employed, and his services were for some months devoted to the collections. Mr. Rowan prepared specimens for the wall-cases in illustration of special memoirs recently published by the Survey, and it is felt that these exhibits will usefully direct the attention of visitors to the areas and special lines of work in which the Survey is engaged.

GREENVILLE A. J. COLE,

Director of the Geological Survey of Ireland.

REPORT OF THE BOARD OF VISITORS  
OF THE  
NATIONAL MUSEUM OF SCIENCE AND ART,  
IRELAND, AND THE ROYAL BOTANIC  
GARDENS, DUBLIN,

*For the Year ending 31st March, 1910.*

TO THE DEPARTMENT OF AGRICULTURE AND TECHNICAL  
INSTRUCTION FOR IRELAND.

The Board of Visitors submit the following as their report for the year ending 31st March, 1910. —

NATIONAL MUSEUM.

On the 14th April, 1910, having invited the attendance of the Director, Count Plunkett, the Visitors made an inspection of the Museum, and in their report they have dealt in detail with the different divisions.

The Visitors observe that the attendance of the public has decreased by 17,856 since last year, the numbers who passed through the turnstiles in 1909-1910 being 279,325, as against 297,180 in the previous year. This is the more regrettable as there has been a steady decrease in the numbers of visitors since the year 1900, when the attendance of the public reached 425,884. On the other hand, the number of students who make practical use of the Museum, in their scientific and art studies, has largely increased.

The following parts of the General Guide to the Art Collections have been reprinted during the year :—

Egyptian Antiquities.

Medieval and Renaissance Sculpture and Decoration.

An illustrated description of the Raised Map of Ireland has been published.

An Illustrated Guide to the Celtic Antiquities of the Christian Period in the National Museum has been prepared by Mr. Coffey, keeper of the Irish Antiquities Collection, and has been published by the Royal Irish Academy, a second edition is now in preparation.

The Visitors note with satisfaction that the Treasury have adopted their recommendation by increasing the emoluments of Dr. Scharff by £100 per annum, as a personal addition to his salary. No other alterations have been made in emoluments or position of the staff. In their opinion, the remuneration of the Keepers of the Museum should be equivalent to that of the Keepers of the British Museum, or, at all events, to that of the Keepers at Edinburgh.

The Visitors again call attention to a recommendation contained in former reports that the position and emoluments of Mr. Dudley Westropp and Miss Knowles should be improved.

The Visitors are glad to note that the Vote for Professional Assistance has been increased in the current year, by the sum of £40, but they are of opinion that this sum is too small, and they recommend that the entire Vote, which includes the remuneration of Mr. Dudley Westropp, should be brought up to a sum of £200 at least.

The Visitors desire to call attention to the following matters relating to the buildings of the Museum.

The groups of statuary on the exterior of the Museum and National Library formed part of the scheme submitted by the architect and carried

out under his direction. The effect is accordingly destroyed by the removal of these sculptures. The fact that it was found necessary to take away the decayed carving does not alter the right of the public to have an integral part of the design for these state buildings restored by the Board of Works.

They regret to find that Room No. 1 on the first floor of the new buildings, has still to be used as an office and workroom for the Keeper of Irish Antiquities, thus preventing its use for the exhibitional purposes for which it is urgently required. The Visitors, in previous reports, with the assistance of the late Sir Thomas Drew, submitted a scheme easy of accomplishment which would have attained the desired object.

The Visitors are informed by the Director that the question of erecting a new wing, crossing the east side of Kildare Place, is in contemplation, in order to provide accommodation for the Botanical and Geological exhibits, in close proximity to the Zoological Collections. They trust that the Department will press upon the Treasury the desirability of having this carried out with as little delay as possible.

The Visitors regard it as of urgent importance that the roofs and skylights of the Temporary Annexes should be put into a proper state of repair. Their present condition is unworthy of an Institution of such importance as the Museum, and it is also a danger to the valuable contents of the Collection. The walls also of these galleries require to be properly plastered.

The Visitors note with satisfaction that provision has been made for a fire-proof Spirit Store, and that the work is now far advanced, and they would press on the attention of the Department the necessity which exists for providing another properly fitted up store for the reception of the valuable collections of bird skins and other specimens which are much used by the staff and experts, and for which the present accommodation is quite inadequate.

The Visitors, in their observations on the Natural History Division, have called attention to the new approach to this part of the building. This is a matter of general interest in its relation to the buildings as a whole.

While considerable improvement has been made in the electric lighting of the buildings, the Visitors are of opinion that additional lamps are required in many positions, which are at present insufficiently lighted, and that considerable improvement might be made in the lighting of the Botanical Division if the carbon filament lamps were replaced by Osrams.

The Visitors observe with satisfaction that the supply of daylight has been greatly improved by the insertion of prismatic glass in the windows of certain rooms in the new buildings; they are glad to hear that similar glass will be supplied in the south windows of the Lower Hall, Natural History Division, from which they anticipate good results, and they recommend that the north windows should be treated in a similar manner. The Visitors renew the recommendation contained in their previous reports that the skylight in Room V., Botanical Division, should be increased in size so as to admit more daylight.

The Visitors would again draw attention to their recommendation, made last year, that in view of the increased accommodation provided in the Museum for exhibition purposes, the number of attendants in the Museum is too small to adequately protect the collections and keep the furniture and fittings in proper order.

The Visitors are pleased to note that, as recommended in last year's report, the Royal Botanic Gardens and the Museum have been placed, through the General Post Office, on the Telephone Exchange. They are informed that this arrangement is working satisfactorily, and that it is a great saving of time to the officials in the Botanic Gardens, the Museum, and the other associated Institutions.

The Visitors again call attention to the urgent need that exists for having the courtyard paved with asphalt, wood, or some other suitable material by which the amount of dust and mud carried into the buildings by wind, and on the feet of visitors, would be minimised.

The Visitors are informed that, in accordance with their suggestions, application was made last autumn for an increase in the Vote for Purchase of Specimens, but that it has not been, as yet, acceded to by the Treasury.

They would again call the attention of the Department, and of the Treasury, to this matter, and to its importance owing to the increased prices which have to be paid for Museum specimens.

#### ART AND INDUSTRIAL COLLECTIONS.

##### *Art Collections.*

*Central Court.*—The Board of Visitors note with pleasure the improvement in the general arrangement of the Central Hall, and congratulate the Director and his subordinates on the excellent work they have accomplished in this direction. The removal of the Longfield Collection from its temporary quarters, and of the Loan Exhibit of modern work, adds greatly to the effect of the fine collection of Celtic Crosses. The Visitors are, however, still of opinion that the elimination of certain of the plaster casts from the under Gallery would in no way detract from the value of the Collection as a whole, and would afford much valuable space which is required for more important objects.

The Coin Collection is in process of arrangement, and the Visitors wish to suggest that while this work is proceeding the coins and other items of lesser importance might be arranged in glazed drawers in order to economise space, as has been done in the Irish Antiquities Division.

The important and valuable collection of Uniforms has been augmented and is well displayed. A notable exhibit in this section is the Regimental Colour of the Ballinashinch Company, presented by R. B. Armstrong, Esq., of Edinburgh.

The collection of Civil and Ecclesiastical Costumes is equally well displayed at the west end, where the east of a Chimney Piece from Verona has been newly erected.

*Rooms I. and II., Ground Floor.*—Greek, Roman, and Egyptian. No change has been made in these sections, which still remain congested.

*Room III., Ground Floor.*—Ethnological. The Visitors notice the great improvement in the lighting of this section by the introduction of prismatic glass. Nothing of importance has been added.

*Rooms IV., V., and VI., Ground Floor.* are practically unchanged.

*Room VII., Ground Floor.*—The Visitors have already noticed the excellent work which is being done in this Musical Section, and they are glad to find that the number of important acquisitions shows no sign of diminution. Two Drums have recently been deposited: one of the Merchants Corps of Irish Volunteers, and one of the Moura Infantry, both of 1803. A fine Double Harp is also a welcome addition.

*Rotunda Gallery.*—The fine collection of silver ware, on loan and otherwise, is shown to the best advantage. The utilisation of the wall space is still under consideration. The Visitors would suggest that a display of wall cases showing a collection of Irish and other table-ware, spoons, forks, knives, &c., would be in keeping with the remainder of the exhibit.

*Room V., First Floor.*—No change.

*Room VII., First Floor.*—The Collection of Japanese Netsukes and Combs has been re-arranged. Two fine specimens of Japanese gold Lacquer have been lent by General Sir Thomas Kelly-Kenny, being gifts made to him by H.I.M. the Emperor of Japan.

*Room VIII., First Floor.*—The Longfield Collection, which was purchased after a valuation of the pottery and porcelain had been made, is now in process of arrangement. The Visitors think that this opportunity should be taken of transferring to the Circulation Section a large quantity of the specimens of modern Viennese and other ware, at present occupying space to which it is not properly entitled.

*Room IX., First Floor.*—No change of importance.

##### *Industrial Collections.*

No important additions have been made to this Collection during the year. One or two objects of interest have been loaned to the Division, and are available for exhibition. One, a model of a Salmon Hatchery, lent by the Fisheries Branch of the Department of Agriculture, and the other a model of a spiral staircase.

## CIRCULATION COLLECTIONS.

There appear to have been 49 cases (all connected with Agriculture), added before the end of the year, but as these were not ready till 31st March last, they were not available for issue during the past year.

The number of cases issued during the year was 589, being a decrease of 181 as compared with 1909; or a decrease of 351 as compared with 1908. The Visitors understand that this decrease is due to a recent regulation restricting the issue of these cases to schools and other institutions, in connection with the Department. Formerly cases were issued by the Museum, at the expense of the Department, on application, to National and other schools. If the Department are unwilling to continue this expenditure, it would be desirable to bring this matter under the notice of the National Board, as the circulation of these cases was found to be of practical educational value.

## IRISH ANTIQUITIES COLLECTIONS.

There are no extensive changes since the date of the last report, the number of lesser improvements alone calls for notice.

In Room No. III, the Leather Shield, recently described in the Proceedings of the Royal Irish Academy, is on exhibition. We note in the same room a cast of a bronze torque, from West Buckland, Somerset, and the torque from the Peerie Collection has been brought out for exhibition. Two woollen hats of the 15th century, from Boushane Bog, near Roscrea, have been purchased.

The value of the casts of Irish Architecture and Crosses is steadily increasing. The casts of Cormac's Chapel and of several crosses have been removed to the Gallery, the new ones, of the curious doorway and High Cross of Dyserth O'Dea, Co. Clare, are now on exhibition. In the Ethnographical Collection, an Iron Cruse, from Antrim, and some of the "St. Brigid's Crosses," made of rushes, have been added.

In the west Crypt, various arrangements and improvements have been effected, notably the collection of queen stones and bronze pots, formerly in Room No. III. The pikes have also been brought together and re-arranged.

## NATURAL HISTORY COLLECTIONS.

*Zoology.*

During the last few years the collection of Irish animals, on the ground floor of the Museum, has received much careful attention at the hands of the Keeper and his assistants, and is rapidly becoming one of the most instructive features of the National Museum. The Collection has grown so large that it now occupies the whole of the ground floor. In the re-arrangement, the Mammals and Birds have been placed towards the east, and the lower forms towards the west end. The method of arrangement, and display of the specimens, indicates the greatest care and forethought, and adds enormously to the interest and educational value of the exhibits. The summer and winter distribution of our native birds is indicated for each form by specially prepared coloured charts, and in many other ways the value of the collection is increased by the introduction of maps and interesting letterpress. The magnificent specimens of the extinct Irish Deer have been transferred to this part of the Museum, and the general plan of placing extinct and fossil Irish forms in close proximity to their nearest existing relatives is one which will doubtless commend itself to all interested in the study of the animals of Ireland. It is to be hoped that the accommodation will prove sufficient for the transference of all the Irish fossil animals to this part of the Museum, so that one may readily recognise how the various groups and families are represented in the fossil and in the recent state in our island. The Visitors regret that no steps have yet been taken to improve the illumination, which has been rendered so defective by the building of the new Royal College of Science. They are glad, however, to learn that it is proposed to use prismatic glass in the windows on the south side of the Museum. It is to be hoped that by this



means, and by using paint of a lighter colour, the illumination of the room will be improved.

The Visitors note that a new doorway has been made in the façade of the building. It possesses no outside porch, which, in the interests of the public, would be an essential feature. It leads directly into the Museum, and its design will, in the opinion of the Visitors, lead to an increase in the amount of dust and dirt introduced into the building to the detriment of the collections. The Visitors are informed that the existing door and entrance vestibule are to be removed in order to afford an approach to the new Royal College of Science buildings. They hope that, in the preparation of the plans, care has been taken to provide a worthy entrance gate and a carriage drive to the new Museum door.

The plan of the stairs leading to the upper floor has been improved and some additional space has been obtained, by this means, on the upper floor. The arrangement and display of the animals on the upper floor, and in the two connected galleries, is most admirable and leaves little to be desired. With the funds and space available, the Visitors anticipate that little more can be achieved here. Not many additions have been made since the last report, but some interesting and excellently coloured models of whales and of tropical and deep-sea fishes, have been secured and placed in position.

The Visitors desire again to call attention to the extremely unsatisfactory state of the rooms devoted to the housing of specimens not exhibited to the public. The Museum possesses a very valuable collection of such specimens which should be readily available for the use of research students and others interested in problems dealing with classification, morphology, animal distribution, &c. Especially interesting and valuable are the collections of Irish forms which have been placed in the Museum by the Fisheries Branch of the Department of Agriculture. All these specimens are carefully labelled and arranged by the Museum staff, but the space available and the presses provided are, in many cases, unsatisfactory and render the collections difficult of access. The main rooms used for the store of these specimens are so crowded that many of the presses can only find accommodation on landings and in passages, where they cause much inconvenience. The work-rooms of the Keeper and his assistants are also crowded to inconvenience by collections of specimens for which proper accommodation cannot be found elsewhere. It seems to the Visitors that all these valuable store collections should be provided with ample accommodation, and be placed under the special care of an assistant, who would himself be likely to undertake research work and be able to assist members of the public by answering their enquiries. In spite of the want of accommodation and the many inconveniences, the Visitors are glad to note that great care has been devoted to the specimens, and that an excellent means has been adopted which enables a ready recognition of the Irish forms.

There is provided, in the part of the Museum open to the public, as pointed out in former reports, an excellent case of type specimens, for the use of junior students of Zoology. These specimens may be removed from the shelves for study, but owing to the unsatisfactory manner in which exhibits are crowded in the Annex rooms, there is not even space for a small table for students to work at, and the case of type specimens has had to be placed in one of the smallest and most frequented of the passage rooms. The Visitors, however, understand that, by a re-arrangement of the Collections in the Annex it is proposed to make provision for a Students' Room during the next year.

The Visitors feel that in their former reports they must have failed to get the Government to realize the deplorable conditions of "Rooms" named Annex 1, II, III, IV, and V. These were in use many years ago at a time when the cattle shows of the Royal Dublin Society were held at Leinster House, and may at that time have been considered suitable for cattle sheds, but by no stretch of the imagination can they be regarded as suitable for the exhibition of the many valuable and interesting objects which are now thrust into them. The walls and partitions are, in many places, rough and unplastered, the roofing is hideous and leaky, and the inequalities in the level of the flooring remind the visitor of the planking

sometimes laid down in tents or booths. The Visitors doubt if there is any museum in the Kingdom in which such wretched accommodation is provided. The condition of the rooms may be gauged from the fact that it has been found necessary to use trays, filled with sawdust and cloths, to catch the water which in wet weather comes through the roof; in some places the Visitors notice that receptacles have actually to be placed on the tops of the glass cases to catch and prevent water reaching the contained specimens. The Visitors are given to understand, by the Director, that he is urging the building of a new wing to provide accommodation for the Botanical and Geological exhibits, in close proximity to the Zoological collections. They hope that such a building will be erected as soon as possible, but in the meantime, they would impress the urgency of improving the rooms indicated, and thus dispelling the bad impression which their present condition necessarily creates in the minds of the public.

In their former reports the Visitors drew attention to the unsatisfactory arrangements in the matter of the dual control of the Geological and Palaeontological specimens. They regret that no changes appear to have been instituted in this respect.

The deep excavations and building connected with the heating of the Royal College of Science have caused much inconvenience at the back entrance to the Zoological part of the Museum. The Visitors most strongly urge that steps should be at once taken to provide really commodious and lightsome accommodation in this position for the specimens at present hidden away in the manner above indicated; they are, however, informed that this is in contemplation, and that the construction of a fire-proof store for the specimens preserved in spirit is in process of construction.

#### *Geology and Mineralogy*

The collection exhibited by the Geological Survey of Ireland in the Curved Gallery, shows that much careful work has been expended upon its arrangement. An ingenious method of displaying the specimens has been adopted in the case of the sedimentary rocks. The specimens of these are practically of uniform size, and are supported upon specially shaped wooden blocks resting upon a horizontal rail. The rocks are grouped under headings corresponding to the Provinces of Ireland.

In the Natural History Collection the Irish Minerals, which are, unfortunately, much crowded, have been re-arranged under the names of the counties from which they were obtained. They are now placed in close proximity to the main collection of minerals and the relief map of Ireland.

The Visitors hope that steps will be taken to engrave the names of the localities, from which they were derived, upon the fine examples of Irish Marbles to be seen in the Rotunda, and in the walls of the Main Hall. Many of these have no names attached, while others are merely marked by paper labels with almost illegible writing. In a great many cases these interesting specimens are hidden from view by the large plaster casts arranged around the Main Hall.

#### *Botany*

In former reports the Visitors called attention to the increasing use of the Herbarium made by students. They are pleased to find that this increase steadily continues, as shown by the fact that no fewer than 486 signed the attendance book in that department during the past year, and that number did not include several who worked merely in the Index Room.

A good collection of European grasses, which has been recently added, must prove of material advantage to students, especially to those studying Agriculture.

The Visitors note with satisfaction that in various portions of the Museum, especially in Room II., new steel cases have been provided, which are a decided improvement on the old cases formerly used.

It is most desirable that an additional supply of apparatus should be provided to illustrate the different functions of the organs of plants or the principles of Vegetable Physiology.

The Hand List of Irish Flowering Plants, which was referred to in the last report as being in the hands of the printer, has since been published

and is sold at a small nominal charge which will enable all students to avail themselves of it.

Nothing has been done to rectify the unsatisfactory state of the electric lighting mentioned in the last report of the Visitors.

The Visitors had, for several years prior to their last report, called attention to the great want of natural light both in the Herbarium and in Room V. In their last report, they expressed their great gratification that some structural alterations had been effected in the Herbarium which had resulted in a marked improvement. They must earnestly urge that similar alterations should be made in Room V.

The Visitors desire to call attention to the fact that the ventilation in several of the rooms is not satisfactory, and that this defect could be easily rectified by inserting in the roof ventilators similar to those in the Herbarium.

Another matter to which they think it right to call attention is, that there is a constant draught in the Keeper's Room which could probably be cured at a small cost by substituting a more substantial partition than the present canvas one between it and Room V.

The Visitors note, with much satisfaction, that it is stated in the report of the Director for 1908-9 that the removal of the Botanical Collection to a more convenient and accessible position, when the new buildings are completed, is in contemplation.

## ROYAL BOTANIC GARDENS.

The Visitors inspected the Gardens on the 14th of April, 1910. They found them, as on former occasions, in excellent condition. Some of the half hardy outdoor specimens had suffered from the severe frost, but the general appearance of the Gardens was not affected.

The number of visitors to the Gardens during the year ending 31st March, 1910, was 430,436, as against 426,717 for the corresponding period of the previous twelve months.

Among the improvements that have been made is the substitution of good soil for the gravelly hillside from which valuable pines were blown down during a recent storm. This portion of the Gardens will soon be in a satisfactory condition for replanting. This work has been carried out without an application for an additional vote.

The rock garden has been considerably extended. It now contains a valuable collection of specimens, while it constitutes an interesting and picturesque feature in the Gardens.

The Visitors note with pleasure that many of their recommendations have been carried out in a satisfactory manner.

The slate staging in the Palm House has been completed, and this important house is now in a very good condition.

The roof of the Orchid and Fern House has been re-constructed, the defective roof having been removed. The Visitors note with satisfaction that the collection of Orchids is in excellent condition. This house is of special interest to visitors, as it contains the best collection of Orchids in any public garden in the United Kingdom, and that its value is appreciated, is evidenced by the fact that many of the most valuable specimens are donations.

The new hydraulic ram is working well. This, with the addition of the new sluice gate and bridge over the overflow, places the system of water supply to the Gardens in a satisfactory condition. The benefit of this system would be increased by a further extension of service mains through the grounds.

The Visitors found the houses generally in good condition.

While the Visitors note with satisfaction that so many of their recommendations have been carried out in an efficient manner, they have to point out certain deficiencies. There exist, at present, no proper sheds for the accommodation of carts, water barrels, harrows and other large garden implements, which, in the absence of such accommodation, must necessarily be left under the weather. The Visitors also call attention to

the fact that the present Propagating Houses are insufficient for the requirements of such an extensive institution. They are of an antiquated type, and should, as soon as possible, be replaced by more suitable structures, as has been done in the People's Garden in the Phoenix Park.

The special attention of the Visitors was called to the character and condition of the various buildings and houses used in connection with the Gardens. They were so much impressed with their inadequacy for the growing requirements of the Gardens that they requested Mr. Moore to draw up a detailed report on the subject. This document, which was furnished by the Department, is appended to the report of the Visitors.

The Visitors are satisfied, from a careful inspection, that money expended on the re-construction of the existing buildings would be simply wasted. The existing stores and offices at the rear of the gate lodge are built round a small quadrangle. They have been added to from time to time, in a patchwork manner, and it would not be possible to make them thoroughly suitable for their purpose. The principal entrance through which stores, or carts of every kind, are admitted is the front entrance gate. This is objectionable, as the vans and carts injure the surface of the garden walks, and the Visitors are of opinion that an essential feature of the re-construction of the buildings should be the construction of a separate goods entrance to the Gardens.

The Visitors attach great importance to the provision within the Gardens of a suitable refreshment room and cycle shed. The cottage now used as a refreshment room might be appropriated to the use of the employé in charge of the goods entrance, which could be conveniently placed next this cottage.

The Visitors have caused a sketch plan to be prepared, showing how their suggestions could be carried out. They recommend that this comprehensive plan should be kept in view, and the work commenced at once, and proceeded with, from time to time, in sections.

The Visitors feel justified in recommending the expenditure of the moderate sum which would be required in order to carry out works which are so urgently required, having regard to the amount of public money voted for the support of the Royal Gardens at Kew and the Royal Botanic Gardens, Edinburgh. These sums, including moneys voted to the Board of Works for new works, repairs, &c., are—

Royal Gardens, Kew,	£38,088
Royal Botanic Gardens, Edinburgh,	£18,560

while the sum voted for the Royal Botanic Gardens, Dublin, amounts only to £6,350.

D. H. MADDEN,  
*President.*

8th June, 1910.

#### APPENDIX.

Royal Botanic Gardens, Glasnevin, Dublin,

11th May, 1910.

SECRETARY, DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION.

I beg to make the following report on the condition of some buildings and offices near the gate, and of several of the arrangements connected with the working of the garden. I have gone through these matters fully with the Assistant Secretary in respect of Agriculture on the ground, and explained them to him in detail, and I understand that he approves of them generally, subject to minor modifications.

1. Refreshment rooms. From the commencement I have protested against the present refreshment rooms. They are unsuitable for the purpose in every way, and many complaints have been made about them. Instead of being on the dusty road, with only a shed behind, they should be inside the garden near the entrance gate, approximately where the stable now is.

2. Suitable accommodation for bicycles should be provided. There is no place in the garden where they can be stored. An unprotected shed has been erected behind the refreshment rooms in which bicycles and perambulators may be stored under the supervision of the refreshment contractor. There is only a plain wire fence and an open gate to protect this shed, and the refreshment rooms are closed from November to March 15th. The shed is out of view and out of the control of the gatekeeper, so he cannot be responsible. There is no space inside the main gates for them.

3. Perambulators and baby cars. Under the regulations made in 1901, by which passes were issued to persons then bringing perambulators into the garden, and to those only, the number of passes has been reduced from 156 to 13. At the end of this year all passes will cease, and accommodation will have to be provided for storing perambulators while the owners are in the garden. Such accommodation is provided at Kew, Edinburgh, Cambridge, and at many continental gardens. Why should Dublin be behind in this respect?

4. Entrance Gate. At Kew and Edinburgh special entrances are provided for heavy goods, and for the workmen and gardening staff. A special man has charge of this gate. At Glasnevin there is no such arrangement. All men come in by the front gate, and most of the carts and drays. Even during visiting hours the workmen, coal carts, drays, and other heavy vehicles with goods have to enter with the general public. I find it impossible to keep the walks about the gate clean, and in repair. Although constantly tended and repaired, they get very dusty in dry weather, and soft and muddy in frosty or wet weather. As many as 10,000 people sometimes pass in and out over the limited space in one day, which is quite trying enough for walks without the extra strain of vehicles. The gatekeeper has to leave his post to ring the bells, and attend to other work. This is also undesirable. The proximity of stables, men's lodge, store, and foreman's office, and propagating department to the public entrance is unsightly and slovenly, and effectually outlaws any opening for improvement.

5. Outdoor foreman's office and tool store. These buildings are on the left of entrance gate. They are most unsuitable. They are too small, and there is no space to extend or remodel in present position. They should be removed to another and more suitable site, or changed to the building now used as a dwelling house by the men.

6. Men's dwelling house. Eight young men, "improvers," who come for two years, live in the garden just inside the gate. There is a plain house with four large rooms only, viz., a mess room, a reading room, and two dormitories. Four men sleep in each dormitory. These rooms are too small. There is no isolating room, and I have had men seriously ill with influenza, bronchitis, diarrhoea, sleeping in the same room with three other men, and with no place to remove the sick man to. Fever has also occurred. This is a serious and dangerous condition of things. The present building would be very suitable for offices and stores.

7. I have absolutely no stores or sheds for storing water carts, water harrows, hand carts, and large implements; they have to stand out in all weathers. Money was voted for such a shed, but no suitable site could be found for it inside the existing walls. There is ample space in the new ground.

8. Propagating Department. This is one of the most important departments in a public garden. All plants for the large houses have to be grown on, and all new plants and sick plants are nursed until strong enough to go up to the large houses. The propagating department near entrance gate is much too small, and the houses are antiquated and unsuitable; further, there is no room to extend or increase them in their present location. I have repeatedly applied for extended accommodation in the propagating houses, but no suitable site can be found inside the garden, and under existing conditions I fear the present unsatisfactory condition must continue to prevail.

I beg to recommend that a comprehensive scheme should be adopted to remedy, by degrees, these defects. There is ample space in the new field outside the garden proper, to which these various buildings could be transferred. If such a definite scheme were sanctioned, and adopted, some-

section of it could be taken in hand each year until it was completed. This has been done at Kew and at Edinburgh. At Edinburgh, the old houses, the propagating houses, and stores have been pulled down and new buildings have been erected to replace them. Definite plans were prepared beforehand, and these are being carried out year by year. I have had a map prepared, which I append, showing the changes I propose. It would, perhaps, in view of the comparatively large expenditure contemplated, be advisable to have the opinion of some person with an expert knowledge of the working of an institution such as this garden beforehand. I would welcome any such inspection and report.

(Sgl.) F. W. MOORE.

# REPORT

## OF THE

### COUNCIL OF TRUSTEES

#### OF THE

## NATIONAL LIBRARY OF IRELAND

*For the Year 1909-1910*

TO THE SECRETARY OF THE DEPARTMENT OF AGRICULTURE AND  
TECHNICAL INSTRUCTION FOR IRELAND

SIR

As Chairman of the Council of Trustees, I have the honour to submit the following Report for the twelve months ending 31st March, 1910, within which period fell the Easter Recess, four days, of 1909, and that of 1910, also four days. The annual summer closure for dusting and arrangement extended to 18 days in July and August. During the twelve months the Library was thus open on 283 days.

The attendances of readers numbered 189,266. This total exceeds that of 1908-9 by 670, but the working library year in 1908-9 was 3 days shorter than that of 1909-10.

Attendances (gentlemen);	morning (10 to 6),	126,183
"	evening (6 to 10),	49,275
Attendances (ladies), morning and evening	(10 to 10),	13,808
		189,266

The daily average of attendances during 1909-10 was 668. The daily average of the attendances of the year 1908-9 was 673.55; of 1907-8, 646.26; of 1906-7, 619.28; of 1905-6, 658; of 1904-5, 677; of 1903-4, 619; of 1902-3, 588.5; of 1901, 518.14; of 1900, 506.5; of 1899, 528.9. Attendances at different hours of the day by the same reader are separately recorded by the turnstile.

During the year ending 31st March, 1910, the number of volumes added to the Library, and made accessible to readers, has been 5,970; of these 630 are folio, 570 quarto, and 4,770 octavo and smaller sizes. A classification of these by topic is given in Appendix I, where also will be found statistics as to the

book-binding, as to the borrowing by members of the Royal Dublin Society, and by certain officers of the Science and Art Institutions, also lists of private persons and of public bodies who are donors of books.

The Author and Title Catalogue for the years 1906-7 has been printed off and issued since the date of the last Report; while considerable progress has been made in preparing for press the Catalogue of the Joly Collection. The Catalogue for the year 1908 has been sent to the printer.

The printing of the Decennial Subject-Index, 1894-1903, has now advanced to the letter D. The preparation of the Septennial Index, 1904-10, is now in progress.

In the Appendix, the Trustees record the names of numerous donors, and note the more remarkable gifts. Here in the Report proper, they desire to state their sense of the value of the gift made by Mrs. Henniker Heaton, from the Library of the late Sir John Banks, and also of a second gift from the Royal College of Physicians in Ireland, supplementing the large one described by the Trustees in last year's Report. The Trustees draw attention to the steady enrichment of the Library by donations of late years.

At their meeting on October 8, 1909, the Trustees addressed to the Department a resolution deprecating the dismissal of two boy Library attendants, who would shortly reach the age of 21 years, and pressing upon the attention of the Department the desirability of now adding to the number of permanent Library attendants, thereby reducing the number of places for temporary boy-attendants to only four, and bringing the proportion of permanent and temporary places into accord with that which prevails in the Department of Printed Books in the British Museum. The Trustees also drew attention to a passage in the Report of the Treasury Committee of 1905 upon Accommodation in the Library, which ran as follows: "We feel that our recommendations would not be complete without some reference to the contingency they may involve as to additional assistance." On this suggestion the Trustees had not previously taken action, because the trained boy attendants from whom alone it is possible to recruit the permanent attendant staff had not yet in sufficient numbers reached the age which renders each of them eligible. But that age would be reached in January and November, 1910, by suitable boys; and this fact, conjoined with the remarkable growth of the Library in size and value (on which the Trustees comment in the Report of 1909), and the serious loss to the service which would be involved in letting trained young men go, determined the Trustees in thus addressing the Department. As a result of this recommendation, the Trustees, at their meeting on January 28, 1910, had communicated to them a letter from the Treasury, dated 30 December, 1909, sanctioning "the proposal that the number of Third Class Attendants at the National Library of Ireland should be increased by two, the number of Boy Attendants being at the same time decreased by two."

We regret to record the death of Dr. Edward Perceval Wright, formerly Professor of Botany in Dublin University,



which occurred on March 2, 1910. Dr. Wright had for seventeen years been one of the Trustees of the National Library, appointed by the Government.

On April 27, 1910, the Council of Trustees suffered a further great loss in the death of Judge Shaw, who had been a Trustee for seven and a half years. He had acted on the Treasury Committee of 1906 with important and useful results to the Library.

The Trustees have much pleasure in noting that useful new shelving was introduced by the Board of Public Works in various parts of the Library building. Especially worthy of note is the shelving in the eastern Strong Room, and the provision of new crates for newspapers in the basement. The Board have also introduced prismatic glass in certain of the Library windows, and thus much improved the distribution of light, particularly on the basement floor, while the comfort of students in the Reading Room has been much promoted by the green shades placed on 55 lamps which light tables, book-presses, and catalogue desk. Several other minor improvements of much use have been made during the year.

The Librarian, by the direction of the Trustees, attended the Annual Meeting of the Library Association, held in Sheffield, September 20-24, 1910.

The Trustees submit the Librarian's Annual Report on the Library and its administration. See Appendix II.

T. A. FINLAY.

## APPENDIX I.

### STATISTICS AND LISTS.

Subjoined is a brief general statement of the attendance of readers since the Library was founded in 1877 :—

YEAR	ATTENDANCE
1878 The first complete year of the Library, ...	27,452
1889 The latest year of lodgment in Leinster House, ...	51,325
1893 The first reliable record after the transfer, in 1890, to the present building, ...	113,888
1894	119,500
1895	125,600
1896	136,365
1897	137,832
1898	142,218
1899	154,878
1900	148,405
Three months, January—March, 1901, ...	40,763
Year, April 1, 1901—March 31, 1902, ...	150,780
Year, April 1, 1902—March 31, 1903, ...	174,786
Year, April 1, 1903—March 31, 1904, ...	181,385
Year, April 1, 1904—March 31, 1905, ...	198,274
Year, April 1, 1905—March 31, 1906, ...	198,402
Year, April 1, 1906—March 31, 1907, ...	178,974
Year, April 1, 1907—March 31, 1908, ...	190,657
Year, April 1, 1908—March 31, 1909, ...	188,596
Year, April 1, 1909—March 31, 1910, ...	189,266

The volumes added to the Library and made accessible, during the year 1909-10, may be grouped as follows:—

Bibliography, Library Economy, Book Racities, and Cyclopaedia		235
works	...	...
Newspapers, General Periodicals,	...	457
Philosophy,	...	193
Religion, Theology, Ecclesiastical History,	...	438
Sociology, Statistics, Political Science,	...	153
Political Economy	...	169
Law	...	92
Parliamentary Papers,	...	109
Administration,	...	158
Associations,	...	14
Education,	...	196
Commerce,	...	30
Amusements, Customs and Manners,	...	84
Philology,	...	151
General Science,	...	82
Mathematics,	...	47
Astronomy,	...	32
Physics, Light, Heat, Electricity,	...	52
Chemistry,	...	67
Geology,	...	63
Paleontology,	...	14
Biology, Anthropology, &c.,	...	62
Botany,	...	61
Zoology,	...	300
Useful Arts in General,	...	19
Patent Office Publications,	...	179
Medicine,	...	345
Engineering,	...	70
Agriculture,	...	53
Domestic Economy,	...	16
Communication, Commerce, Railway Guides, &c.,	...	93
Chemical Arts, Manufactures, and Trades,	...	78
Fine Arts in General,	...	79
Landscape Gardening,	...	6
Architecture,	...	43
Sculpture,	...	19
Drawing and Design,	...	18
Painting,	...	38
Engraving,	...	5
Photography,	...	4
Music,	...	35
Archæology,	...	57
General Literature,	...	23
English Literature (Essays, Poetry, Periodicals, &c.),	...	324
German	...	145
French,	...	163
Latin,	...	64
Italian,	...	39
Greek,	...	61
Other Literatures,	...	89
General History,	...	18
Geography and Travel,	...	200
Biography, Genealogy, Heraldry, &c.,	...	210
Ancient History,	...	30
History of Europe,	...	222
"    " Asia,	...	19
"    " Africa,	...	12
"    " America,	...	26
"    " Oceania,	...	5
Total	...	5,970

## 431

Subjoined is the return as to binding done for the Library during 1909:

In the binder's hands, Dec. 31st, 1908, ... ..	1,040 vols.
Sent to the binder during 1909 ... ..	4,500 "
	<hr/> 5,540 "
Returned by binder during 1909, ... ..	4,700 "
	<hr/> 840 "
In the binder's hands, Dec. 31st, 1909, ... ..	

Subjoined is the account of books borrowed from the Library during twelve months ending March 31, 1910, by members of the Royal Dublin Society, and by certain officers of the Institutions of Science and Art:—

In borrowers' hands, March 31st, 1909, ... ..	134
Lent between April 1, 1909, and March 31, 1910, to members of the Royal Dublin Society, ... ..	778
Lent to officers of the Institution of Science and Art, ... ..	427
	<hr/> 1,339
Returned during the twelve months, ... ..	1,217
	<hr/> 122
In borrowers' hands, March 31st, 1910, ... ..	
With members of the Royal Dublin Society, ... ..	64
With officers of the Institution of Science and Art, ... ..	58
	<hr/> 122

The number of members of the Royal Dublin Society entitled to borrow, according to the last official list published by the Society, is 329.

The following are some of the more noteworthy special gifts received during the year:—

MRS. HENNIKER HEATON presented several hundred volumes from the Library of her father, the late Sir John Banks, M.D. It would be impossible in a short notice such as this to give an adequate idea of the variety and interest of these volumes, which relate to almost every department of knowledge.—Literature, English and Foreign, History, Science, Mathematics, Medicine, Theology, Philosophy, Music, Travel, etc. They include some early editions of the great writers, and others which are now of historic interest. To mention only a few: Pope's *Poetical Works*, Foulis, Glasgow, 1735; Otway's *Works*, 3 vols., 1708; Rowe's *Works*, 2 vols., 1747; Chesterfield's *Letters to His Son*, 4 vols., 1774; Blackmore's *King Arthur*, 1697; Alfieri's *Tragedies*, 2 vols., Florence, 1855; Wieland's *Works*, 45 vols., Karlsruhe, 1814-18; Catullus, Tibullus, and Propertius, *Opera*, Toulon, 1715; some, Baskerville, Birmingham, 1775; Lucretius, *De Rerum Natura*, Baskerville, 1772; Zimmerman's *Annusabekant*, 6 vols., Leipzig, 1784; Le Sage's *Gil Blas*, 4 vols., London, 1779; Le Diable Boiteux, Paris, 1778; *Le Bachelier de Salomonique*, Paris, 2 vols., 1767; Lessing's *Tragedies*, 1782; Richardson's *Essays on Shakespeare*, London, 1784; West's *Odes of Pindar*, 1749; Churchill's *Poems*, Dublin, 1765; Boswell's *Account of Corneille*, Dublin, 1788; *Anacreon*, Scypho, trans. Fawkes, 1789; Juvenal's *Satires*, trans. Dryden, 1713; De Stoll's *L'Alemagne*, 3 vols., Paris, 1818; Fielding's *Joseph Andrews*, 2 vols., Dublin, 1747; Cox's *Russian Discoveries between Asia and America*, 1787; Guicciardini's *Historia d'Italia*, 2 vols., 1645; Guarini's *Pastor Fido*, 2 vols., 1800; Davila's *Historia delle Guerre Civili*, 2 vols., London, n.d.; Baccaria's *Dei Delitti e delle Pene*, London, 1744; Beauvois' *Les Mercantiles Redivres*, Dublin, 1778; Fontenelle's *La Pluralité des Mondes*, 1762; Watt's *Improvement of the Mind*, 1741; Staunton's *Embassy to China*, 2 vols., 1798; Townsend's *Journey Through Spain*, 2 vols., Dublin, 1792; Morier's *Journey Through Persia*, 1812; Corvisart's *Mémoires du Cœur, Paris*, 1811;

Heberden's *History and Cure of Disease*, 1809; Sully's *Memoirs*, 3 vols., London, 1756; Moore's *Memoirs of Captain Rock*, 1824; Lyttelton's *Letters*, 2 vols., Dublin, 1752; Chais' *Lettres sur les Indulgences*, 2 vols., La Haye, 1751; Hamilton's *Metaphysics*, 2 vols., 1859; *Discussions*, 1852. ...

**THE ROYAL COLLEGE OF PHYSICIANS, IRELAND.**—A supplementary gift of upwards of 70 volumes, principally medical, among them Delamotte's *Traité complet des accouchemens*, 1729; Peyar's *Myriologia*, Basle, 1685; Quincy's *Pharmacopœia Officialis*, 1735; Darwin's *Zoonomia*, vol. I., 1794; Lind's *Scurvy*, 1772; Exton's *Misanthropy*, 1752; Gregory's *Prælectæ of Phisic*, 1772; also Lully's *Opera*, 1617?

**THE COUNCIL OF WESLEY COLLEGE.**—Isaac Titsingh's trans. of *Annales du Japon*, London, 1834; San Jernamo's *Description of Barmese Empire*, Rome, 1833; *History of the Temple of Jerusalem*, 1836; Ahmed Ibn Mohammed Ab-Makkari's *History of the Mohammedan Dynasties in Spain*, 1840; Jauhar's *Memoirs of the Moghul Emperor Humayun*, trans. Stewart, 1832; Garcin de Tassy's *Histoire de la Littérature Hindoue et Hindoustani*, 2 vols., 1829-47; Haß Khabla's *Lexicon bibliographicum et encyclopædium*, Leipzig, 1835; Taki-Eddin-Ahmed-Makrisi's *Histoire des Sultans Memlours de l'Égypte*, Paris, 1837; *Rig-Veda Samhitā*, Sanskrit & Latin, ed. Rosen, Lib. 1, 1838; *Harinassa, ou Histoire de la Javelle de Hari*, trad. Langlois, 2 vols., Paris, 1834; *Memoirs of the Moghul Emperor Fieuz*, trans. Stewart, 1830; *Memoirs of the Emperor Jahangir*, trans. Price, 1829; *Kawara Sambhava: Kalkassa Gemen*, Sanskrit & Latin, 1838; *Elisavet's History of Varton*, 1830; Ibn Khalikan's *Biographical Dictionary*, I., 1842; Erliyn's *Travels in Europe, Asia*, etc., 1834-45, and others. A very valuable addition to the Oriental Literature of the Library.

**OFICINA DE'CAJJE I DE PUBLICACIONES, MONTEVIDEO.** Works by Antonio N. Pereira, in 29 volumes, 1877-99; Pellico's *Mis Prisiones*, trad. por Pereira; Shakespeare's *Hamlet*, trad. Pereira, 1892; *El Rey Lear*, trad. 1894, etc.

**THE DIRECTOR-GENERAL OF THE SURVEY DEPARTMENT, GIZA, EGYPT.**—The *Publications and Reports* of the Department on the Topography, Geology, Palæontology, etc., of Egypt, upwards of 40 volumes (to be continued), also the Topographical Map of Egypt, 100 sheets (to be continued), and various Town Maps, 55 sheets, and Special Maps, 110 sheets (to be continued).

**THE GOVERNMENT OF THE KINGDOM OF THE NETHERLANDS.**—Ch. Leemann's *Béat-Boudouir dans l'île de Java, dessiné par F. C. Wilson*, French and Dutch Texts, with Plates, 1873-4.

**THE EARL OF RADNOR.** *Catalogue of the Pictures in the Collection of the Earl of Radnor*, by Helen Matilda, Countess of Radnor, 2 vols., privately printed, Clarendon Press, 1909; an extremely beautiful book.

**THE DUBLIN CHAMBER OF COMMERCE.**—161 volumes of Newspapers: *The Times*, 109 volumes, between 1859-1903; *Daily Express*, 16 vols., 1885-1901; *Freeman's Journal*, 36 vols., 1850-1898.

**MR. ANDREW ROBINSON**, Board of Public Works. *The Dublin Main Drainage Inquiry*, 1879, with Maps.

**THE REV. W. HACKETT, S.J.**, Clongowood Wood College. *The Clongowood*, vols. I.-IV.; a complete set to date.

**PROF. O. H. OLDFHAM.**—*The Speaker*, vols. 17, 18, Old Ser.; vols. 3-4, and 11-15 New Ser.

**MONSIEUR THE DUKE OF ORLEANS.**—*Croisière Océanographique dans la Mer du Groënland en 1903*, par Mons. A. de Gerlache, Commandant de la "Belgica," Brussels.

**MR. E. R. MCCLINTOCK DIX.**—*Seymour de Ricci's Census of Customs*, 1909 (Bibliographical Soc., No. XV.)

**MISS LONGFIELD.**—Valentine Gill's *New Map of the County of Wexford*, London, 1811; *Index to the Townland Survey of the County of Longford*, 1837; also some early publications of the Royal Dublin Society.

**MISS S. J. GOUGH.**—41 volumes of general literature, including Parrell's *Poems*, Dublin, 1771; *Marriott's Life, Letters, and Poems*, Doncaster, 1803; *Select Collection of Letters of the Antients*, ed. John Savage, 1703.

**THE DEAN AND COUNCIL OF THE ROYAL COLLEGE OF SCIENCE.**—*Revue des Patois* (continued as *Revue de Philologie Française*), vols. I., XI., 1887-97.

**THE COMMISSION FOR GEOLOGICAL RESEARCH IN GREENLAND, COPENHAGEN.**—Glaesche's *Mineralogiske Rejse i Grønland*, 1878.

A list is subjoined of the names of persons from whom gifts have been received between April 1, 1908, and March 31, 1910:—

- |  |   |
|--|---|
| Aberdeen, The Countess of.                       | Lyster, T. W.                           |
| Albert, S.A.S., Prince of Monaco.                | Macartney-Filigate, W. T.               |
| Bachofen, Lt.-Col. Emil.                         | Mages, W. K.                            |
| Ballinger, John, M.A.                            | McCready, Rev. C. T.                    |
| Berry, H. F., Litt.D.                            | Millar, J. Shannon.                     |
| Best, R. I.                                      | Neale, James, F.S.A., Executors of.     |
| Bigger, F. J.                                    | Neil, J. Crawford.                      |
| Brown and Phillips, Leicester Galleries, London. | Nutting, Rev. John K., Boston, Mass.    |
| Byrne, Matthew J.                                | O'Connell, John                         |
| Carson, James, Lisburn.                          | O'Neill, J. J.                          |
| Coffey, George.                                  | Parsons, B.                             |
| Colanane, Rev. A., O.P.                          | Paton, J. and J.                        |
| Cooke, John, M.A.                                | Pénard, Eugène, Geneva.                 |
| Craig, James, M.D.                               | Pharmaceutical Press, London.           |
| Crawford, Henry S.                               | Præger, R. Lloyd.                       |
| Daly, Dominick, B.L.                             | Purser, Miss Sarah H.                   |
| Day, Davies and Hunt, London.                    | Quastch, Bernard                        |
| Dennahy, W. F.                                   | Quiggin, E. C., Ph.D.                   |
| Descours, Paul.                                  | Raymond, George L., Princeton Univ.     |
| Dix, E. R. McClintock.                           | Reeves, P. Oswald.                      |
| Dixon, Prof. Henry H.                            | Rudmose-Brown, Professor T. D.          |
| Dixon, Samuel G., M.D., U.S.A.                   | Ryan, Frederick W.                      |
| Dowden, Professor.                               | Salter, Miss Mary                       |
| Duffy, Mrs. Vincent.                             | Sandoe, John.                           |
| Farr, Marcus S., Princeton, U.S.A.               | Scharff, R. F., Ph.D.                   |
| Forde, A. H., Ph.D.                              | Smith, Catherine, R.H.A.                |
| Glasgow, J. and H. H.                            | Spink & Co., London.                    |
| Gough, Miss S. J.                                | Stenay, G. Johnstone, F.R.S.            |
| Green, Mrs. J. R.                                | Synnot, Nicholas J.                     |
| Green, James, Mass., U.S.A.                      | Tempest, William, Dundalk.              |
| Hackett, Rev. W., S.J.                           | Thalbitzer, William, Ph.D., Copenhagen. |
| Hanson, J. C. M.                                 | Trades' Directories, Ltd., Edinburgh    |
| Haslam, Mrs.                                     | Walkey, A. H.                           |
| Healy, Maurice J., M.A.                          | Walsh, Lieut. W. P. Pakenham.           |
| Henniker-Henson, Mrs.                            | Welch, R., Belfast.                     |
| Hogg, Rt. Hon. Jonathan                          | West, John L.                           |
| Hogg, Mrs. Jonathan.                             | Westropp, Thomas J.                     |
| Holt, E. W.                                      | White, H. Bentry, I.S.O.                |
| Huggins, Sir William.                            | White, Rev. J. D. Newport, D.D.         |
| Huggins, Lady.                                   | Williams, E. E., B.L.                   |
| Kelly, Miss M. T.                                | Williamson, Dr., Hampstead, London.     |
| Kershaw, Dr. E., Oldham.                         | Wood, Rev. E. M., LL.D.                 |
| Leech, H. Brougham, LL.D.                        | Wright, C. T. Hagberg, LL.D.            |
| Ling-Roth, H., Halifax.                          | Yates, Miss, Dundrum.                   |
| Longfield, Miss.                                 |   |
| Ludloff, Richard.                                |   |

Gifts have been received between April 1, 1909, and March 31, 1910, from the following Public Departments, Public Bodies, Public Institutions, and Learned or Literary Societies:—

- Municipal Council of the City of Dublin.  
 Port and Docks Board, Dublin.  
 Belfast Harbour Commissioners.  
 His Majesty's Stationery Office.  
 Lords Commissioners of H.M. Treasury.  
 Lords Commissioners, Admiralty.  
 British Museum.  
 Patent Office.  
 Foreign Office.  
 War Office.  
 Office of the Registrar-General of Scotland.  
 Astronomer Royal, Greenwich.  
 Ordnance Survey of England and Wales.  
 " " " Ireland.  
 Geological Survey of Great Britain.  
 " " " Ireland.  
 " " " Scotland.  
 " " " Canada.  
 " " " India.  
 " " " United States of America.  
 " " " The Transvaal.  
 " " " Iowa, U.S.A.  
 Agency General of Tasmania.  
 " " " New South Wales.  
 " " " South Australia.  
 " " " Western Australia.  
 " " " Queensland.  
 Archeological Survey Department, Madras.  
 Government of Madras.  
 Survey Department, Giza, Egypt.  
 Government of the Netherlands.  
 Italian Government.  
 Government of Bombay.  
 Department of Agriculture, India.  
 United Provinces Government, Allahabad.  
 Bengal Government.  
 Meteorological Office, India.  
 India Office, Whitehall.  
 Government of Canada.  
 Ministry of Interior, Canada.  
 Department of Agriculture and Technical Instruction for Ireland.  
 Congested Districts Board.  
 Board of Education, South Kensington.  
 Board of Intermediate Education, Ireland.  
 Office of Records of Scotland.  
 Department of the Interior, U.S.A.  
 Department of Agriculture, U.S.A.  
 Director-General of Statistics, Uruguay, Monte Video.  
 Minister of Education, Ontario.  
 Commission of Health, Pennsylvania.  
 Bureau of Labor, Washington.  
 Representative, Commonwealth of Australia, London.  
 Commissioners of Education, Washington.  
 Department of Commerce and Labor, U.S.A.  
 Trueman House Department, N.Y.  
 Bureau of Statistics, Treasury Department, U.S.A.  
 Coast and Geodetic Survey, U.S.A.  
 Smithsonian Institution.  
 Corporation of London.  
 Royal Society, London.  
 Linnean Society, London.

Australasian Association for the Advancement of Science.  
 London County Council.  
 London School Board.  
 Pharmaceutical Society of Great Britain.  
 Pharmaceutical Society of Ireland.  
 Cryptogamic Society of Scotland.  
 Royal Geographical Society.  
 Botanic Gardens, Kew.  
 Commission for Geological Research in Greenland, Copenhagen.  
 First Church of Christ Scientist, Dublin.  
 County Borough of Brighton.  
 General Medical Council, London.  
 City of Dublin Public Health Office.  
 School Attendance Committee, Dublin.  
 Friends' Tract Association, London.  
 Royal Statistical Society, London.  
 Massachusetts General Hospital.  
 Royal Astronomical Society, London.  
 Royal Institute of British Architects, London.  
 Society of Accountants and Auditors, London.  
 Chemical Society, London.  
 Masonic Grand Commandery of Illinois, Chicago.  
 Society of Arts, London.  
 Australian Museum, Sydney.  
 Boston Museum of Fine Arts.  
 Boston Museum and Art Gallery.  
 National Museum of Wales.  
 Manchester City Art Gallery.  
 Bristol Art Gallery.  
 Council Indian National Congress.  
 Irish Agricultural Organization Association.  
 Royal College of Science, Dublin.  
 Royal Irish Academy of Music.  
 Royal Botanic Gardens, Glasnevin.  
 College Historical Society, Trinity College, Dublin.  
 Dublin Fire Brigade, per T. P. Purcell.  
 Irish Unionist Alliance.  
 National Liberal Club.  
 National Council, Dublin.  
 Irish Art Students' Exhibition.  
 Irish Central Bureau for the Employment of Women.  
 City of Dublin Technical Schools.  
 Municipal Technical Institute, Belfast.  
 Theosophical Society, London.  
 Methodist Orphan Society.  
 Methodist Missionary Soc., London.  
 Royal Zoological Society, Ireland.  
 Zoological Society of London.  
 Royal Horticultural Society of Ireland.  
 Incorporated Law Society, Ireland.  
 Peace Society, London.  
 Irish Peace Society.  
 Navy League.  
 Statistical and Social Inquiry Society of Ireland.  
 Jewish Historical Society of England.  
 Belfast Municipal Art Gallery and Museum.  
 Battersea Public Libraries.  
 Birmingham Free Libraries' Committee.  
 Boston Public Library.  
 Bristol Public Library.  
 St. Helen's Public Library.  
 Imperial Library, Calcutta.  
 Cambridge University Library.  
 Library of Congress, U.S.A.  
 New York State Library.

Harvard University Library.  
 Cornell University Library.  
 Johannesburg Public Library.  
 Biblioteca Pública Provincial de la Plata.  
 Library Co. of Philadelphia.  
 Cardiff Central Public Library.  
 Glasgow University Library.  
 Leeds Public Library.  
 Liverpool Public Library.  
 John Rylands Library, Manchester.  
 Manchester Free Library.  
 Milwaukee Public Library.  
 Nottingham Library.  
 Newcastle-on-Tyne Central Library.  
 New South Wales Public Library.  
 Newcastle-under-Lyme Public Library.  
 Bodleian Library, Oxford.  
 St. Louis Public Library, St. Louis, U.S.A.  
 Bibliothèque du Musée, Bergen.  
 Los Angeles Public Library.  
 Carnegie Free Library, Cork.  
 Biblioteca Nacional, Habana.  
 Warrington Borough Library.  
 Warrington Library and Museum.  
 Worcester Library and Museum.  
 Osaka Library, Japan.  
 Public Library of Boston, Massachusetts.  
 Gorton College, Cambridge.  
 Newnham College, Cambridge.  
 Alexandra College, Dublin. Lady Principal.  
 Congowes Wood College.  
 Wesley College, Council of.  
 Trinity College, Dublin: The Board.  
 College Historical Society, Dublin University.  
 Royal University of Ireland.  
 Royal College of Physicians, Ireland.  
 Aberdeen University.  
 Belfast University.  
 University College, Cork.  
 University College, Galway.  
 Durham University.  
 University of Wales.  
 University of Sheffield.  
 University of Leeds.  
 University of Liverpool.  
 University of Manchester.  
 University of Cambridge.  
 Edinburgh University.  
 Glasgow University.  
 Harvard University.  
 University of London.  
 Royal Holloway College.  
 University of Birmingham.  
 University College, London.  
 University of California.  
 Leland Stanford Junior University, California.  
 New York University.  
 University of Wisconsin.  
 Princeton University.  
 Cornell University.  
 University of Illinois.  
 Carnegie Foundation for the Advancement of Teaching.  
 College of Preceptors, London.  
 St. Andrew's University.  
 Melbourne University.  
 Dartmouth College, N.H.



Sydney University.  
 Johns Hopkins University.  
 Columbia University.  
 Chicago University.  
 Catholic University, Washington.  
 Yale University.  
 Imperial University, Kyoto, Japan.  
 " " College of Science and Engineering.  
 Research Defence Society, London.  
 Hungarian Ornithological Society, Budapest.

The following societies present publications annually :

The Royal Society of Edinburgh : *Transactions and Proceedings*.  
 The Royal Society : *Proceedings*.  
 The Royal Dublin Society : *Proceedings and Scientific Proceedings and Transactions*.  
 The Royal Irish Academy : *Proceedings*.  
 Royal Society of Antiquaries, Ireland : *Journal*.  
 The County Kildare Archaeological Society : *Journal*.  
 Belfast Naturalists' Field Club : *Report and Proceedings*.  
 Royal Institute of British Architects : *Journal and Calendar*.  
 Society of Chemical Industry : *Journal*.  
 Sanitary Institute : *Journal*.  
 Society for the Preservation of the Irish Language : *Report*.  
 Royal Academy of Medicine in Ireland : *Transactions*.  
 Institute of Bankers in Ireland, 8, Kildare-place, Dublin : *Journal*.  
 Limerick Field Club : *Journal*.

The following periodical publications have been presented in the year 1900 to the National Library of Ireland, either by the publishers, or by private donors, or by public bodies :—

*Alliance News*.  
*Board of Trade Journal*.  
*Board of Trade Labour Gazette*.  
*Board of Agriculture Journal*.  
*British Medical Journal*.  
*Bulletin, Department of Labor, U.S.A.*  
*Christian Science Journal*.  
*Civil Service Competitor*.  
*Civil Service Weekly*.  
*Cyclists' Touring Club Gazette*.  
*Department of Agriculture and Technical Instruction for Ireland "Journal."*  
*Drapers' Record*.  
*Father Mathew Record*.  
*Free Russia*.  
*Gentleman*.  
*International Theosophist (formerly The Irish Theosophist)*.  
*Irish Cyclist*.  
*Irish Draper*.  
*Irish Field*.  
*Irish Homestead*.  
*Irish Ironmonger*.  
*Irisleabhar Mairké Nuadh*.  
*Irish Rosary*.  
*Irish Packet*.  
*Irish Tobacco Trade Journal*.  
*Irish Vintner and Grocer*.  
*Kew Bulletin*.  
*Musical Herald*.  
*Notion in Arms*.  
*New Century Path*.  
*New Church Magazine*.  
*Propriété Industrielle*.  
*Socialist, The*.  
*T.C.D.*

The following Irish newspapers, presented during the year 1909, are filed for reference when bound :—

<i>Anglo-Celt</i> (Cavan).	<i>Kildare Observer</i> (Knaus).
<i>Armagh Guardian</i> .	<i>Kilkenny Journal</i> .
<i>Ballymurray Free Press</i> .	<i>Kilkenny Moderator</i> .
<i>Banbridge Chronicle</i> .	<i>Leinster Express</i> (Maryborough).
<i>Belfast News-Letter</i> .	<i>Leinster Leader</i> (Naas).
<i>Bray and South Dublin Herald</i> .	<i>Limerick Chronicle</i> .
<i>Carnishfergus Advertiser</i> .	<i>Limerick Leader</i> .
<i>Clare Journal</i> (Ennis).	<i>Lisburn Herald</i> .
<i>Coleraine Chronicle</i> .	<i>Lurgan Mail</i> .
<i>Cork Accent</i> .	<i>Meath Chronicle</i> (Kells).
<i>Cork Constitution</i> .	<i>Mid-Ulster Mail</i> (Cookstown).
<i>Cork Examiner</i> .	<i>Nationalist, The</i> (Carlow).
<i>Cork County Eagle</i> (Skibbereen).	<i>Nationalist, The</i> (Clongow).
<i>Deity Standard</i> .	<i>New Ross Standard</i> .
<i>Donagel Independent</i> (Ballyshannon).	<i>Northern Constitution</i> (Coleraine).
<i>Donagel Vindictor</i> (Ballyshannon).	<i>Northern Whig</i> (Belfast).
<i>Dundalk Democrat</i> .	<i>Rathfriland News</i> .
<i>Dungannon News</i> .	<i>Roscommon Messenger</i> .
<i>Echo, The</i> (Enniscorthy).	<i>Portadown News</i> .
<i>Enniscorthy Guardian</i> .	<i>Saturday Record</i> (Ennis).
<i>Evening Herald</i> (Dublin).	<i>Sinn Féin, Daily and Weekly</i> .
<i>Evening Telegraph</i> (Dublin).	<i>Sligo Champion</i> .
<i>Fiannán's Journal</i> .	<i>Sligo Independent</i> .
<i>Galway Express</i> .	<i>Sport</i> (Dublin).
<i>General Advertiser</i> (Dublin).	<i>Sunday Independent</i> (Dublin).
<i>Ireland's Own</i> (Dublin).	<i>Tyrone Herald</i> .
<i>Irish Catholic</i> (Dublin).	<i>Tyrone Constitution</i> (Omagh).
<i>Irish Daily Independent</i> (Dublin).	<i>Wander, The</i> (Dublin).
<i>Irish Excelsior</i> (Dublin).	<i>Waterford Chronicle</i> .
<i>Irish Nation</i> .	<i>Weekly Freeman and Supplement</i> .
<i>Irish News</i> (Belfast).	<i>Weekly Irish Times</i> .
<i>Irish Pocket</i> (Dublin).	<i>Westmeath Examiner</i> (Mullingar).
<i>Irish People</i> .	<i>Western News</i> (Ballinasloe).
<i>Irish Weekly Independent</i> .	<i>Wexford Independent</i> .
<i>Irish Weekly</i> (Belfast).	<i>Wexford People</i> .
<i>Kerry Burning Post</i> .	<i>Wicklow News-Letter</i> .
<i>Irish Weekly Mail</i> .	<i>Wicklow People</i> .
	<i>Witness, The</i> (Belfast).

The Royal Dublin Society has continued its generous gift of daily and weekly papers as follows :—

<i>Belfast News-Letter</i> .	<i>Illustrated Sporting and Dramatic News</i> .
<i>Cork Constitution</i> .	<i>Illustration</i> (Paris).
<i>Daily Express</i> (Dublin).	<i>Illustrated Zeitung</i> .
<i>Evening Mail</i> .	<i>Journal de Débats</i> (Paris).
<i>Evening Herald</i> .	<i>Lady's Pictorial</i> .
<i>Evening Telegraph</i> .	<i>Morning Post</i> .
<i>Daily Graphic</i> .	<i>New York Tribune</i> .
<i>Daily Mail</i> .	<i>Leath's Weekly</i> (New York).
<i>Daily News</i> .	<i>Pall Mall Gazette</i> .
<i>Daily Chronicle</i> .	<i>Queen</i> .
<i>Daily Telegraph</i> .	<i>Evening Standard</i> .
<i>Freeman's Journal</i> .	<i>St. James's Gazette</i> .
<i>Financial News</i> .	<i>Sketch</i> .
<i>Figaro</i> (Paris).	<i>Sphinx</i> .
<i>Globe</i> .	<i>Standard</i> .
<i>Graphic</i> .	<i>Tatler</i> .
<i>Scotsman</i> .	<i>Times</i> .
<i>Illustrated London News</i> .	<i>Truth</i> .
<i>Irish Daily Independent</i> .	<i>Westminster Gazette</i> .
<i>Irish Times</i> .	<i>World</i> .

## APPENDIX II.

## REPORT OF THE LIBRARIAN, 1909-1910.

To the Council of Trustees.

This is the eleventh report of the new series ordered by the Trustees in January, 1900, in which the Librarian addresses to the trustees an informal statement upon such matters in the administration of the Library as may be deemed by the Trustees of sufficient interest, and not unsuitable for publicity.

*Arrangement of Books.*

As usual, there has been a minute examination of the arrangement of certain sections; corrections have been made where necessary; new labels have been printed to mark these corrections, or to replace worn-out labels. The sections thus treated during the past year were:—German and French Literature, Mathematics, Astronomy, Physics, Geology, Medicine, Agriculture, Travel, Biography, Education, Army and Military Science, portions of the Fine Arts section, and of Ancient History and Philology.

A very large collection of Parliamentary reports and blue books presented in former years by the Royal Dublin Society, and laid aside in the basement of the Library, was overhauled, dusted, and sorted. Those when brought together with another collection of valuable Parliamentary reports, furnished the material for a fine selection of reports of Commissions, and special Departmental reports upon important subjects, Fisheries, Agriculture, Land Laws, Education, Hygiene, Finance, Local Government, etc., which have been bound, catalogued, and placed in the various sections of the Library beside kindred works. Again, where necessary, application was made for volumes to complete long sets, and the Library thus has come to possess most useful series of annual reports of the great Boards, whereby much saving of time in reference is assured. The task occupied a section of workers during three weeks, when the Library was closed in July and August, 1909.

*The Banks Gift and the Royal College of Physicians' Gift.*

Another of the special tasks of the period of closure may be mentioned here. The numerous volumes of these generous gifts were impressed with special stamps recording the source whence they came. The collections were examined and sorted, and several hundred volumes were chosen for immediate cataloguing. The fine Banks collection is described in Appendix I., that of the Royal College of Physicians in the Report of last year.

*Maps.*

During the past year the Map Room has been examined and re-arranged. Not only has the ordinary large influx of the Ordnance Survey been kept in order and bound, but a number of missing sheets of the maps of other years have been obtained by special application, and sets long awaiting completion are now available for public use. By classification of old maps issued by private cartographers, several more volumes have been formed. The remarkable set of M.S. maps of the Irish Mail Coach routes, dating about 1806-1811, presented by the Commissioners of Public Works in 1906, have been prepared for public use. Four Key Maps were made on four sheets of the Ordnance quarter-inch map of Ireland, a graphic "guide" to the collection being thus formed. In addition an Alphabetical Index of the names of chief places marking the routes has been written. The collection consists of 202 very large maps in 13 volumes, and to the account of them given in the Report of 1906-7 it may be added that they were surveyed by William Larkin, Thomas Duncan, and Sir Charles Coote, the first named being a particularly well-known Irish cartographer.

*Catalogues' Work.*

Catalogue slips have been written for all the new books added by purchase, and also for a very large number of volumes selected from the donations of recent years, such as the donation by Mrs. Hemmiker Heaton from Sir John Banks's Library, and the two gifts of the Royal College of Physicians.

The cataloguing and binding of the numerous and valuable pamphlets of the Joly Collection has advanced considerably. A large body of plays, mostly Dublin eighteenth-century reprints of seventeenth and eighteenth century dramatists, has been catalogued; the plays being then bound in groups determined by their authorship.

*Printing of Catalogue.*

The Author-Catalogue of Books Added during 1906-7 has been issued, and the printing of the Author-Catalogue for 1908 has begun. The preparation for the press of the slips written for the books in the Joly Collection has now been almost completed, and when the cataloguing of the Joly pamphlets, at present in progress, has advanced sufficiently, the slips written for these will be incorporated with the Catalogue of Books, and the whole printed, as soon as possible. These pamphlets, described in the Librarian's Report for 1902-3, are very numerous, certainly several thousands, and the cataloguing of them presents many bibliographical difficulties, so that the progress of the work, which has to be carried on along with the cataloguing of the general library, is necessarily slow.

*The Desk Catalogue.*

The past year has been one of unusually steady persistence in the task of inserting in the Desk Catalogue the entries from the last printed supplements. The whole of the volume devoted to the new books of 1906 has thus been incorporated in the general alphabetical order, and at the date of writing good progress has been made with the volume dealing with the two years 1906 and 1907. The task of rectifying errors in the alphabetical arrangement of the older entries, due in large measure to overcrowding, has been pursued on opportunity offered, the more easily because of the interleaving and re-binding of the Desk Catalogue, lately reported. Omitting mention of minor corrections, the entries Petzsch, Racine, Smith, Wright, James, South, and all the names which group alphabetically in the neighbourhood of these entries, have been taken up, put in proper order, and laid down afresh.

*Desk Subject Index.*

The insertion by a library-attendant in large folio ledgers for use in the Reading Room, of subject references taken from the 15 volumes in which Mr. Archer catalogued the accessions of the twenty years 1874-1893, has now been pursued for several years, and has advanced beyond the middle of the alphabet. It has proved very useful to students. With it, in these volumes, will be incorporated, by the same method, the Decennial Subject Index, 1894-1903, the printing of which is far advanced. An extra set of the proofs of this latter index is kept at the Library counter for reference, and has already been of much service.

Steady advance has been made in other branches of activity on which the Trustees have received information in former reports. It is not necessary to dwell upon the daily round of ordinary duties which maintain the usefulness of a public library.

It is, moreover, impossible but that important topics shall be omitted or too slightly treated in the report of a particular year, yet the deficiency of one report, as the series continues, will be made good by the statement in another, so that a collection of these reports will give a fair summary of those points concerning the internal administration of the Library which are worthy of preservation.

THOMAS W. LAWTE

Librarian.

JANUARY 20, 1910.